



## TITLE V OPERATING PERMIT

Issued pursuant to Title 22a of the Connecticut General Statutes (CGS) and Section 22a-174-33 of the Regulations of Connecticut State Agencies (RCSA) and pursuant to the Code of Federal Regulations (CFR), Title 40, Part 70.

<b>Title V Permit Number</b>	053 – 0071 - TV
<b>Client/ Sequence /Town/Premises Numbers</b>	130-006-053-0009
<b>Date Issued</b>	December 11, 2002
<b>Expiration Date</b>	December 11, 2007

**Corporation :**

Pratt & Whitney, Division of United Technologies Corporation

**Premises location:**

400 Main Street, East Hartford, Connecticut 06108

**Name of Responsible Official and Title:**

Lorin Sodell, Director, Facilities & Services

All pages 1 through 63 inclusive, of this document are hereby incorporated by reference into this Title V Operating Permit.

ARTHUR J. ROCQUE, JR.  
Arthur J. Rocque, Jr.  
Commissioner

December 11, 2002  
Date

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## LIST OF ACRONYMS

### ACRONYM .....DESCRIPTION

°F .....	Degrees Fahrenheit
ACFM .....	Actual Cubic Feet per Minute
ASC .....	Actual Stack Concentration
CAAA .....	Clean Air Act Amendments of 1990
CEMS .....	Continuous Emission Monitoring System
CFR .....	Code of Federal Regulations
CGS .....	Connecticut General Statutes
CO .....	Carbon Monoxide
CO <sub>2</sub> .....	Carbon Dioxide
CP/OP .....	Construction Permit/Operating Permit
DEP .....	Department of Environmental Protection
DERC .....	Discrete Emission Reduction Credit
EMU .....	Emission Unit
EPA .....	Environmental Protection Agency
FT <sup>2</sup> .....	Square Feet
GAL .....	Gallon
GEMU .....	Grouped Emission Unit
GPEE .....	General Permit for Emergency Engines
GPSC .....	General Permit for Surface Coating
HAP .....	Hazardous Air Pollutant
HLV .....	Hazard Limiting Value
HR .....	Hour
LB .....	Pounds
M <sup>3</sup> .....	Cubic Meters
MASC .....	Maximum Allowable Stack Concentration
MACT .....	Maximum Achievable Control Technology
MIN .....	Minutes
MSDS .....	Material Safety Data Sheet
NO <sub>x</sub> .....	Nitrogen Oxides
NSPS .....	New Source Performance Standard
NSR .....	New Source Review
O <sub>2</sub> .....	Oxygen
OP .....	Operating Permit
PM-10 .....	Particulate Matter less than 10 microns
PSIG .....	Pounds per Square Inch (gage)
R .....	Registration
RCSA .....	Regulations of Connecticut State Agencies
SCFM .....	Standard Cubic Feet per Minute
SO <sub>2</sub> .....	Sulfur Dioxide
TOP .....	Temporary Operating Permit
TPY .....	Tons per 12 Consecutive Months
TSP .....	Total Suspended Particulate
µg/m <sup>3</sup> .....	Micrograms per cubic meter
VOC .....	Volatile Organic Compound

## **Title V Operating Permit**

**All conditions in Sections III, IV, VI and VII of this permit are enforceable by both the Administrator and the Commissioner unless otherwise specified. Applicable requirements and compliance demonstration are set forth in Section III of this permit. The Administrator or any citizen of the United States may bring an action to enforce all permit terms or conditions or requirements contained in Sections III, IV, VI and VII of this permit in accordance with the Clean Air Act (CAA), as amended.**

## **Section I: Premises Information/Description**

### **A. PREMISES INFORMATION**

Nature of Business: Uninstalled engine manufacturing, assembly and testing

Primary SIC: 3724 NAIC: 54171

Facility Mailing Address: Pratt & Whitney  
400 Main Street, Mail-Stop 401-08  
East Hartford, CT 06108

Telephone Number: (860) 565-7929

### **B. PREMISES DESCRIPTION**

The Pratt & Whitney East Hartford facility engages in development, manufacturing processes, assembly and testing of experimental and production aircraft engines and components, as well as overhaul and repair of jet engines.

The three powerhouse boilers and the cogeneration system provide process and building heating and cooling steam. The cogeneration system also provides a majority of the electrical power required by the facility. The three boilers are registered (R 053-0039, 41 & 42) and have been grouped into GEMU-001. The cogeneration system was issued CP/OP 053-0049 on 7/10/2002. It has been designated EMU-002.

Vitiated Inlet Air Heaters X7 & X8 are used in some test programs to preheat the gas turbine inlet air. The two Inlet Air Heaters are registered (R 053-0019 & 20) and have been grouped into GEMU-003.

The facility has numerous diesel, natural gas and propane fired emergency engines. All diesel fired emergency engines that are not registered or permitted have been grouped into GEMU-004. All natural gas fired emergency engines that are not registered or permitted have been grouped into GEMU-005. All propane fired emergency engines that are not registered or permitted have been grouped into GEMU-006.

The X-Test Burner Rigs are used in conducting of performance evaluation tests. They are not registered or permitted and have been grouped into GEMU-007.

The 2 Test Cells are used in the testing of uninstalled aircraft engines. The Test Cells are not registered and have been grouped into GEMU-008.

The facility has a number of coating spray booths that apply both VOC and non-VOC based specialty coatings. Three paint spray booths in the Overhaul & Repair Operations were issued CP/OP 053-0055. They have been designated GEMU-009. Two Paint spray booths in E building were issued CP/OP 053-0064 and 053-0065. They have been grouped into GEMU-010.

The hollow fan blade paint spray booth, Specialty spray booth CANMC STC PB and Specialty coat booth MERL STC PB were issued CP/OP 053-0121, 122 and 124, respectively. They have been grouped into GEMU-011.

Paint spray booths that are not registered or permitted have been grouped into GEMU-012.

Plasma spray booth MERL PSB and Plasma spray booth AMS HVOF were issued CP/OP 053-0123 and 132, respectively. They have been grouped into GEMU-013.

## **Section I: Premises Information/Description**

### **B. PREMISES DESCRIPTION, continued**

The cold cleaning units are used to remove soils from metal surfaces of uninstalled engine parts, instrumentation or facilities equipment. They do not require a registration or a permit. The cold cleaning units have been grouped into GEMU-014.

Two underground storage tanks store #6 oil for use in the boiler house. The two tanks are subject to the NSPS Subpart Kb. They have been grouped into GEMU-015.

The three boilers (GEMU-001) are covered by Trading Agreement and Order No. 8134 for Emissions Trading. The spray booths (GEMU-009, 10, 11 & 12) and the aerospace parts and products operations are subject to the Aerospace Manufacturing and Rework MACT.

## Section II: Emissions Units Information

### A. EMISSION UNITS INFORMATION

Emission units are set forth in Table II.A.1.

TABLE II.A.1. EMISSIONS UNIT DESCRIPTION			
Emissions Units	Emissions Unit Description	Control Unit Description	NSR Permit, Order, or Registration Number*
GEMU-001	Union WT-10 Boiler #6 Union WT-VO Boiler #8 Union WT-VO Boiler #9	None	R 053-0039 R 053-0041 R 053-0042 Trading Agreement & Order-8134
EMU-002	FT-8 Gas Turbine Combined Cycle Cogeneration System with Heat Recovery Steam Generator	SCR	CP/OP 053-0049
GEMU-003	Vitiated Inlet Air Heaters X7 & X8	None	R 053-0019, R 053-0020
GEMU-004	Emergency Engines –Diesel	None	None
GEMU-005	Emergency Engines –Natural Gas	None	None
GEMU-006	Emergency Engines -Propane	None	None
GEMU-007	Burner Rigs – X-Test	None	None
GEMU-008	Test Cells X-7, X-8	None	None
GEMU-009	3 Paint spray booths –Overhaul & Repair Operations	Waterwall or dry panel filter	CP/OP 053-0055
GEMU-010	2 Paint spray booths (building E)	Waterwall or dry panel filter	CP/OP 053-0065, 66
GEMU-011	Hollow Fan Blade Paint spray booth (building C) Specialty spray booth CANMC STC PB Specialty coat booth MERL STC PB	None	CP/OP 053-0121 CP/OP 053-0122 CP/OP 053-0124

## Section II: Emissions Units Information

**TABLE II.A.1. EMISSIONS UNIT DESCRIPTION, continued**

<b>Emissions Units</b>	<b>Emissions Unit Description</b>	<b>Control Unit Description</b>	<b>NSR Permit, Order, or Registration Number*</b>
GEMU-012	Miscellaneous paint spray booths	None	None
GEMU-013	Plasma spray booth MERL PSB Plasma spray booth AMS HVOF	None	CP/OP 053-0123 CP/OP 053-0132
GEMU-014	Cold Cleaners	None	None
GEMU-015	2 50,000 gallon underground storage tanks 169R1, 170R1	None	None

(\*) It is not intended to incorporate by reference these NSR Permits, Orders, or Registrations into this Title V Operating Permit.



## Section II: Emissions Units Information

### A. EMISSION UNITS INFORMATION, continued

The permittee shall be allowed to operate under the following Standard Operating Scenario without notifying the Commissioner, provided that such operations are explicitly provided for and described in the table below. There are no Alternate Operating Scenarios for the premises.

TABLE II.A.2. OPERATING SCENARIO IDENTIFICATION	
Emissions Units Associated with the Scenarios	Description of Scenarios
GEMU-001	The standard operation of the 3 boilers is to provide process and building heating and cooling steam.
EMU-002	The standard operation of the cogeneration system is to provide process and building heating and cooling steam. It also provides a majority of the electrical power required by the facility.
GEMU-003	The standard operation of the Vitiated Inlet Air Heaters X7 & X8 is to support test cell operation.
GEMU-004, 5, 6	The standard operation of the emergency engines is to provide emergency power (electrical & fire pumps) for operations in the facility or maintenance purposes.
GEMU-007	The standard operation of the X-Test Burner Rigs is the conducting of performance evaluation tests.
GEMU-008	The standard operation of the 2 Test Cells is to test uninstalled aircraft engines
GEMU-009, 10, 11, 12, 13	The standard operation of the paint spray booths is to coat uninstalled engine parts.
GEMU-014	The standard operation of the cold cleaning units is to clean and remove soils from metal surfaces of uninstalled engine parts, instrumentation or facilities equipment.
GEMU-015	The standard operation of the 2 underground storage tanks is to provide #6 oil storage for the facility.

### Section III: Applicable Requirements and Compliance Demonstration

The following tables contain summaries of applicable regulations and compliance demonstration for each identified Emissions Unit and Operating Scenario regulated by this permit.

#### A. EMISSION UNITS GEMU-001

Table III.A. EMISSION UNITS GEMU-001	
Pollutants or Process Parameters	Compliance Demonstration Requirements
1. Sulfur content	<p><u>Limitations or Restrictions</u></p> <p>No person, except as provided in RCSA §22a-174-19(a)(2)(ii), (a)(3)(i), and (a)(3)(ii), shall use or burn fuel which contains sulfur in excess of a maximum of one percent (1.0%) by weight (dry basis). [RCSA §22a-174-19(a)(2)(i)]</p> <p>All fuel burned at this plant shall have a maximum sulfur content of 0.5%, dry weight basis. [CP/OP 053-0049 Part VIII.E.]</p> <p>i. <u>Monitoring and Testing Requirements</u></p> <p>The permittee shall monitor the sulfur content of the liquid fuels burned in three powerhouse boilers, using either a fuel certification for a delivery of fuel from a bulk petroleum provider or a copy of a current contract with the fuel supplier supplying the fuel used by the equipment that includes the applicable sulfur content of the fuel as a condition of each shipment or by sampling after each transfer/shipment to the large bulk storage tanks. [RCSA §22a-174-33(j)(1)(K)(ii)]</p> <p>ii. <u>Record Keeping Requirements</u></p> <p>The permittee shall make and keep records of the sulfur content of the fuels used in the three powerhouse boilers. Records for a fuel certification and sampling shall include the following information: the date of delivery, the name of the fuel supplier, type of fuel delivered, API gravity of such fuel, the percentage of sulfur in such fuel, by weight, dry basis, and the method used to determine the sulfur content of such fuel. Records for a current contract shall include the following information: the name of the fuel supplier and type or grade of fuel delivered. [RCSA §22a-174-33(j)(1)(K)(ii)]</p>

### Section III: Applicable Requirements and Compliance Demonstration

**Table III.A. EMISSION UNITS GEMU-001**

Pollutants or Process Parameters	Compliance Demonstration Requirements
2. NO <sub>x</sub>	<p><u>Limitations or Restrictions</u>  The owner or operator of a stationary source subject to RCSA §22a-174-22 may, in accordance with subsection (d)(1)(A) of this section, comply with the requirements of this section by meeting applicable emission limitations specified in Table 22-1 of this section. [RCSA §22a-174-22(e)(1)]</p> <p>For Other Boiler the NO<sub>x</sub> limitations are 0.25 lb/MMBtu when firing residual oil and 0.20 lb/MMBtu when firing natural gas. [RCSA §22a-174-22(e) Table 22-1]</p> <p>The owner or operator of a stationary source subject to this section may use NO<sub>x</sub> DERCs or NO<sub>x</sub> allowances or both to comply with the applicable emission limitation contained in subsection (e) of this section pursuant to a permit or order issued by the commissioner. [RCSA §22a-174-22(j)(1)]</p> <p>i. <u>Monitoring and Testing Requirements</u>  The permittee shall conduct an emission test at least once every five years for the three powerhouse boilers to demonstrate compliance with RCSA §22a-174-22. [RCSA §22a-174-22(k)(1)] Testing shall be conducted in compliance with sampling and analytical procedures approved under 40 CFR Part 60, Appendix A, or under procedures in RCSA §22a-174-5(d).</p> <p>ii. <u>Record Keeping Requirements</u>  The permittee shall make and keep the records for the three powerhouse boilers as described below.</p> <ol style="list-style-type: none"> <li>Monthly and annual records (e.g. fuel use, continuous emissions monitoring, operating hours) to determine whether NO<sub>x</sub> emissions from such premises in any calendar year are in excess of twenty-five (25) tons for a premises located in a severe nonattainment area for ozone or fifty (50) tons for a premises located in a serious nonattainment area for ozone; [RCSA §22a-174-22(l)(1)(C)]</li> <li>Records of all tune-ups, repairs, replacement of parts and other maintenance; [RCSA §22a-174-22(l)(1)(D)]</li> <li>Copies of all documents submitted to the Commissioner pursuant to this section; [RCSA §22a-174-22(l)(1)(E)]</li> <li>Procedures for calculating NO<sub>x</sub> emission rates in (B) and (C) above; [RCSA §22a-174-22(l)(1)(G)]</li> <li>Records of the dates, times and places of all emission testing required by this section, the persons performing the measurements, the testing methods used, the operating conditions at the time of testing, and the results of such testing. [RCSA §22a-174-22(l)(1)(H)]</li> </ol> <p>iii. <u>Reporting Requirements</u>  The permittee of any source subject to RCSA §22a-174-22 shall submit a report on NO<sub>x</sub> emissions from such source, on a form provided by the Commissioner, on or before April 15 of each year. [RCSA §22a-174-22(l)(6)]</p>

### Section III: Applicable Requirements and Compliance Demonstration

**Table III.A. EMISSION UNITS GEMU-001**

Pollutants or Process Parameters	Compliance Demonstration Requirements
3. Trading Agreement	<p><u>Limitations or Restrictions</u></p> <p>The permittee owns and operates three (3) dual-fuel burning boilers, capable of burning natural gas or #6 fuel oil. The 3 boilers are subject to Section 22a-174-22 of the Regulations of Connecticut State Agencies, pertaining to control of NOx emissions. [Trading Agreement and Order 8134 Section A.2]</p> <p>On and after May 31, 1995, Section 22a-174-22(e) of the Regulations requires that the 3 boilers emit NOx at rates no greater than the RACT rate. The permittee proposes to use approved DERCs for compliance purposes when operating the 3 boilers on fuels that exceed the RACT rate. [Trading Agreement and Order 8134 Section A.4]</p> <p>The Commissioner, in accordance with the provisions of this Trading Agreement and Order No. 8134, and pursuant to Section 22a-174-22(j) of the Regulations, hereby allows P&amp;W to comply with Section 22a-174-22 of the Regulations through use of DERC trading referenced in Section A herein, to achieve the NOx emission reduction required by Section 22a-174-22(d)(1) of the Regulations. [Trading Agreement and Order 8134 Section B]</p> <p>The permittee shall have in its possession approved DERCs each month. [Trading Agreement and Order 8134 Section C.1]</p> <p>Prior to May 1, 2003, the permittee shall comply during operation with the enforceable maximum FLERs of 0.33 lb/MMBtu (boiler 6 - #6 oil), 0.45 lb/MMBtu (boilers 8 &amp; 9 - #6 oil), 0.30 lb/MMBtu (boiler 8 – natural gas), 0.36 lb/MMBtu (boiler 9 – natural gas), averaged on a 24-hour basis. [Trading Agreement and Order 8134 Section C.2]</p> <p>No later than May 1, 2003, the permittee shall comply with the requirements of Section 22a-174-22(d)(1) of the Regulations. However, after full program review of this and other Trading Agreements and Orders and, if determined to be appropriate, the Commissioner may grant a written extension of this Trading Agreement and Order. [Trading Agreement and Order 8134 Section C.3]</p> <p>i. <u>Monitoring and Testing Requirements</u></p> <p>The permittee shall monitor the amounts of all fuel use for the 3 boilers and the approved DERCs required to comply with Section 22a-174-22 of the Regulations. [Trading Agreement and Order 8134 Section C]</p> <p>ii. <u>Record Keeping Requirements</u></p> <p>The permittee shall make and keep records for Trading Agreement and Order No. 8134 after May 31, 1995 and until May 1, 2003, as described below. [Trading Agreement and Order 8134 Section C]</p>

### Section III: Applicable Requirements and Compliance Demonstration

**Table III.A. EMISSION UNITS GEMU-001**

Pollutants or Process Parameters	Compliance Demonstration Requirements
3. Trading Agreement, continued	<p>ii. <u>Record Keeping Requirements, continued</u></p> <p>The permittee shall document that sufficient approved DERCs are available for the 3 boilers no later than the first of each calendar month to assure compliance for, at a minimum, that calendar month. [Trading Agreement and Order 8134 Section C.1.a.]</p> <p>The permittee shall, no later than the tenth day of each month, calculate DERCs used in the preceding calendar month for each engine, as follows: [Trading Agreement and Order 8134 Section C.1.b.]</p> <p>Engine DERCs (tons) = [(Hours of Operation x FLER in lb/hr) – (fuel use in MMBtu x (0.95 x RACT rate in lb/MMBtu))] / 2000 lb/ton</p> <p>Where:</p> <p style="padding-left: 40px;">RACT rate = RACT rate of 0.25 lb/MMBtu</p> <p style="padding-left: 40px;">FLER = full load emission rate</p> <p style="padding-left: 40px;">Discount = 5% design margin applied to the RACT rate</p> <p>The permittee shall document and record monthly consumption of fuel and DERCs. [Trading Agreement and Order 8134 Section C.1.c.]</p> <p>The permittee shall maintain documentation to attest to the fact that DERCs used during the ozone season were generated during the ozone season. The ozone season is from May 1 through September 30 in any calendar year. Generator certification of this fact shall be sufficient. [Trading Agreement and Order 8134 Section C.1.f.]</p> <p>iii. <u>Reporting Requirements</u></p> <p>The permittee shall, no later than March 1, of each year that Trading Agreement and Order No. 8134 is in effect, include with its annual emissions statement report to the Commissioner, the monthly rate of fuel consumption for each boiler and DERCs used by each boiler for the previous calendar year. [Trading Agreement and Order 8134 Section C.1.d.]</p>

### Section III: Applicable Requirements and Compliance Demonstration

#### B. EMISSION UNIT EMU-002

Table III.B. EMISSION UNIT EMU-002	
Pollutants or Process Parameters	Compliance Demonstration Requirements
1. Fuel Consumption	<p><u>Limitations or Restrictions</u> The maximum fuel consumption over any consecutive 12 month period for the FT-8 Stationary Gas Turbine Cogeneration System is 5,421,500 gallons of Jet fuel. [CP/OP 053-0049 Part I.A.2]</p> <p>i. <u>Monitoring and Testing Requirements</u> The permittee shall monitor the fuel consumption of the fuels burned in the FT-8 Stationary Gas Turbine Cogeneration System, using a continuous monitoring system to monitor and record the fuel consumption. [CP/OP 053-0049 Part IV.A.1] [40 CFR Part 60 Subpart GG §60.334(a)]</p> <p>ii. <u>Record Keeping Requirements</u> The permittee shall make and keep records of the monthly and consecutive twelve month fuel consumption of the fuels burned in the FT-8 Stationary Gas Turbine Cogeneration System. The consecutive twelve month fuel usage shall be determined by adding the current month's fuel usage to that of the previous eleven months. The permittee shall make these calculations within 30 days of the end of the previous month. [CP/OP 053-0049 Part IV.B.1]</p>

### Section III: Applicable Requirements and Compliance Demonstration

**Table III.B. EMISSION UNIT EMU-002**

Pollutants or Process Parameters	Compliance Demonstration Requirements
2. Sulfur content and Nitrogen content of the liquid fuel	<p><u>Limitations or Restrictions</u></p> <p>The Jet fuel Sulfur content (% by weight, dry basis) for the FT-8 Stationary Gas Turbine Cogeneration System is limited to 0.1%. [CP/OP 053-0049 Part I.A.3]</p> <p>The Jet fuel Nitrogen content (% by weight) for the FT-8 Stationary Gas Turbine Cogeneration System is limited or less than or equal to 0.015%. [40 CFR §60.332]</p> <p>Every owner or operator subject to the provision of this subpart shall comply with one or the other of the following conditions: [40 CFR §60.333]</p> <ol style="list-style-type: none"> <li>a. No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis.</li> <li>b. No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight.</li> </ol> <p>i. <u>Monitoring and Testing Requirements</u></p> <p>The permittee shall monitor the sulfur content and the nitrogen content of the Jet fuel burned in the FT-8 Stationary Gas Turbine Cogeneration System in accordance with 40 CFR Part 60 Subpart GG §60.334(a), using the methods specified in 40 CFR Part 60 Subpart GG §60.335(a) and (d). The analysis may be performed as specified in §60.335(e). [CP/OP 053-0049 Part IV.A.2] [40 CFR Part 60 Subpart GG §60.334(a), §60.335(a), §60.335(d), §60.335(e)]</p> <p>ii. <u>Record Keeping Requirements</u></p> <p>The permittee shall make and keep records of the sulfur content and the nitrogen content of the Jet fuel burned in the FT-8 Stationary Gas Turbine Cogeneration System. Records for a fuel certification and sampling shall include the following information: the date of delivery, the name of the fuel supplier, type of fuel delivered, the percentage of sulfur and nitrogen in such fuel, by weight, dry basis, and the methods used to determine the sulfur and nitrogen content of such fuel. Records for a current contract shall include the following information: the name of the fuel supplier and type or grade of fuel delivered. [RCSA §22a-174-33(j)(1)(K)(ii)]</p>

### Section III: Applicable Requirements and Compliance Demonstration

Table III.B. EMISSION UNIT EMU-002	
Pollutants or Process Parameters	Compliance Demonstration Requirements
2. Sulfur content and Nitrogen content of the liquid fuel, continued	<p>iii. <u>Reporting Requirements</u></p> <p>The owner or operator shall submit an excess emissions report for:</p> <p>(1) Nitrogen oxides. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with §60.332 by the performance test required in §60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required by §60.8. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under §60.335(a). [40 CFR §60.334(c)(1)]</p> <p>(2) Sulfur dioxide. Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent. [40 CFR §60.334(c)(2)]</p>



### Section III: Applicable Requirements and Compliance Demonstration

Table III.B. EMISSION UNIT EMU-002

Pollutants or Process Parameters	Compliance Demonstration Requirements
3. Hours of Operation	<p><u>Limitations or Restrictions</u></p> <p>The maximum hours of operation when burning Jet fuel over any consecutive twelve month period for the FT-8 Stationary Gas Turbine Cogeneration System is 2,500 hours per year. [CP/OP 053-0049 Part I.A.4]</p> <p>Pratt &amp; Whitney shall burn natural gas at all times except during a curtailment period (A curtailment period is a period in which the gas supplier ceases to supply natural gas due to a limited supply.) or during maintenance or during required testing. During such periods Pratt &amp; Whitney may burn Jet fuel. [CP/OP 053-0049 Part I.A]</p> <p>i. <u>Monitoring and Testing Requirements</u></p> <p>The permittee shall monitor the hours of operation of the FT-8 Stationary Gas Turbine Cogeneration System using an hour meter to continuously count the hours when burning Jet fuel. [CP/OP 053-0049 Part IV.A.3]</p> <p>ii. <u>Record Keeping Requirements</u></p> <p>The permittee shall make and keep records of the monthly and consecutive twelve month hours of operation of the FT-8 Stationary Gas Turbine Cogeneration System when burning Jet fuel. The consecutive twelve month hours of operation shall be determined by adding the current month's hours of operation to that of the previous eleven months. The permittee shall make these calculations within 30 days of the end of the previous month. [CP/OP 053-0049 Part IV.B.1]</p>

### Section III: Applicable Requirements and Compliance Demonstration

Table III.B. EMISSION UNIT EMU-002	
Pollutants or Process Parameters	Compliance Demonstration Requirements
4. Opacity	<p><u>Limitations or Restrictions</u>  Effective on January 1, 1976, the owner or operator of any fuel burning equipment burning liquid or solid fuels having a maximum rated heat input of two hundred fifty million BTU per hour or more shall install, maintain, and operate a smoke and opacity monitor approved in accordance with RCSA 22a-174-4(d)(1). [RCSA 22a-174-4(b)(1)]</p> <p>The maximum opacity shall not exceed 10% except during start-up, shutdown and malfunction. [CP/OP 053-0049 Part I.A.5]</p> <p>Opacity shall not exceed 20%, except for a period of not longer than three (3) minutes in any consecutive 30 minute period. [CP/OP 053-0049 Part I.C.5]</p> <p>i. <u>Monitoring and Testing Requirements</u>  The permittee shall monitor the opacity from the FT-8 Stationary Gas Turbine Cogeneration System using an opacity monitor when jet fuel is fired. [CP/OP 053-0049 Part III.C]</p> <p>ii. <u>Record Keeping Requirements</u>  The permittee shall make and keep records of the opacity from the FT-8 Stationary Gas Turbine Cogeneration System. [CP/OP 053-0049 Part III.C]</p> <p>iii. <u>Reporting Requirements</u>  The permittee shall submit to the Commissioner on forms furnished or prescribed by him a report summarizing opacity monitoring data for the preceding three months. Such reports shall be due not later than thirty (30) days following the end of each calendar quarter. [RCSA 22a-174 4(b)(1)]</p>

### Section III: Applicable Requirements and Compliance Demonstration

Table III.B. EMISSION UNIT EMU-002

Pollutants or Process Parameters	Compliance Demonstration Requirements
5. Start-up, Shutdown & Malfunction Limits	<p><u>Limitations or Restrictions</u></p> <p>Turbine start-up shall be defined as that period of time from which initiation of combustion turbine firing until the unit reaches steady-state operation. This period shall not exceed 60 minutes for a hot start, nor 180 minutes for a cold start. A cold start shall be defined as start-up when the turbine has been down for more than 24 hours. [CP/OP 053-0049 Part I.C.1]</p> <p>Shutdown shall be defined as that period of time from the initial lowering of the turbine output to the cessation of turbine operation. This period shall not exceed 30 minutes. [CP/OP 053-0049 Part I.C.2]</p> <p>The hours of start-up and shutdown shall not exceed 250 hours in any consecutive 12 month period. [CP/OP 053-0049 Part I.C.3]</p> <p>i. <u>Monitoring and Testing Requirements</u></p> <p>The permittee shall monitor the hours of start-up and shutdown of the FT-8 Stationary Gas Turbine Cogeneration System using an hour meter to continuously count the hours. [CP/OP 053-0049 Part IV.A.3]</p> <p>ii. <u>Record Keeping Requirements</u></p> <p>The permittee shall make and keep records of the monthly and consecutive twelve month hours of start-up and shutdown of the FT-8 Stationary Gas Turbine Cogeneration System. The consecutive twelve month hours of operation shall be determined by adding the current month's hours of operation to that of the previous eleven months. The permittee shall make these calculations within 30 days of the end of the previous month. [CP/OP 053-0049 Part IV.B.1]</p>

### Section III: Applicable Requirements and Compliance Demonstration

Table III.B. EMISSION UNIT EMU-002			
Pollutants or Process Parameters	Compliance Demonstration Requirements		
6. Allowable Emission Limits	<u>Limitations or Restrictions</u>		
	The permittee shall not exceed the following emission limits for the FT-8 Stationary Gas Turbine Cogeneration System.[ CP/OP 053-0049 Part V]		
	Criteria Pollutants	PPMVD <u>@15%O2</u>	TPY
	PM-10		10.10
	SOx		37.21
	NOx	9	45.21
	VOC		2.70
	CO		98.80
	Pb		0.0047
	Non-Criteria Pollutants		
	Sulfuric Acid		0.77
	Ammonia	10	19.12

### Section III: Applicable Requirements and Compliance Demonstration

**Table III.B. EMISSION UNIT EMU-002**

Pollutants or Process Parameters	Compliance Demonstration Requirements																												
6. Allowable Emission Limits, continued	<p><u>Limitations or Restrictions, continued</u></p> <p><b>HAP Summary</b></p> <p><b><u>Natural Gas Fired:</u></b> MASC** (ug/m<sup>3</sup>)</p> <table> <tr> <td>Ammonia</td><td>31431.27</td></tr> <tr> <td>Nitric Acid</td><td>52385.45</td></tr> <tr> <td>Sulfuric Acid</td><td>1746.18</td></tr> </table> <p><b><u>Jet Fuel Fired:</u></b></p> <table> <tr> <td>Arsenic</td><td>4.37</td></tr> <tr> <td>Beryllium</td><td>0.87</td></tr> <tr> <td>Chromium</td><td>218.27</td></tr> <tr> <td>Nickel</td><td>436.55</td></tr> <tr> <td>Cadmium</td><td>34.92</td></tr> <tr> <td>Formaldehyde</td><td>1047.71</td></tr> <tr> <td>Ammonia</td><td>31431.27</td></tr> <tr> <td>Copper</td><td>1746.18</td></tr> <tr> <td>Mercury</td><td>87.31</td></tr> <tr> <td>Nitric Acid</td><td>52385.45</td></tr> <tr> <td>Sulfuric Acid</td><td>1746.18</td></tr> </table> <p>** Maximum Allowable Stack Concentration</p>	Ammonia	31431.27	Nitric Acid	52385.45	Sulfuric Acid	1746.18	Arsenic	4.37	Beryllium	0.87	Chromium	218.27	Nickel	436.55	Cadmium	34.92	Formaldehyde	1047.71	Ammonia	31431.27	Copper	1746.18	Mercury	87.31	Nitric Acid	52385.45	Sulfuric Acid	1746.18
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### Section III: Applicable Requirements and Compliance Demonstration

**Table III.B. EMISSION UNIT EMU-002**

Pollutants or Process Parameters	Compliance Demonstration Requirements												
6. Allowable Emission Limits, continued	<p>i. <u>Monitoring and Testing Requirements</u>  The permittee shall demonstrate compliance with the above emission limits for the FT-8 Stationary Gas Turbine Cogeneration System using emission factors from the following sources: [OP 053-0049 Part V]</p> <p>a. NO<sub>x</sub>, CO: P&amp;W Power Systems emission test data for FT-8 turbines, as listed below.</p> <table data-bbox="405 557 850 649"> <tr> <td><u>Natural Gas fired</u></td><td><u>lb/MMBTU</u></td></tr> <tr> <td>NO<sub>x</sub></td><td>0.032</td></tr> <tr> <td>CO</td><td>0.077</td></tr> </table> <table data-bbox="405 673 779 766"> <tr> <td><u>Jet fuel fired</u></td><td></td></tr> <tr> <td>NO<sub>x</sub></td><td>0.047</td></tr> <tr> <td>CO</td><td>0.025</td></tr> </table> <p>b. TSP, PM-10, SO<sub>x</sub>, VOC (for all fuels): Compilation of Air Pollutant Emission Factors, AP-42, Fifth edition, Tables 3.1-2, 3.1-4, &amp; 3.1-6, pages 3.1-4, 3.1-6, &amp; 3.1-7, January 1995.</p> <p>c. Pb (Jet fuel): Compilation of Air Pollutant Emission Factors, AP-42, Fifth edition, Table 3.1-7, page 3.1-8, January 1995.</p> <p>d. H<sub>2</sub>SO<sub>4</sub> (Jet fuel): CTDEP emission factor of 2.45 S lb/1000 gal for liquid fuel, where S is the maximum percent sulfur content by weight.</p> <p>e. Ammonia: Tons per year calculated from 10 ppmvd.</p> <p>f. HAPs: Compilation of Air Pollutant Emission Factors, AP-42, Fifth edition, Table 3.1-7, page 3.1-8, January 1995.</p> <p>ii. <u>Record Keeping Requirements</u>  The permittee shall make and keep records of the emission calculations for the FT-8 Stationary Gas Turbine Cogeneration System. [RCSA §22a-174-4(c)(1)]</p>	<u>Natural Gas fired</u>	<u>lb/MMBTU</u>	NO <sub>x</sub>	0.032	CO	0.077	<u>Jet fuel fired</u>		NO <sub>x</sub>	0.047	CO	0.025
<u>Natural Gas fired</u>	<u>lb/MMBTU</u>												
NO <sub>x</sub>	0.032												
CO	0.077												
<u>Jet fuel fired</u>													
NO <sub>x</sub>	0.047												
CO	0.025												

### Section III: Applicable Requirements and Compliance Demonstration

Table III.B. EMISSION UNIT EMU-002

Pollutants or Process Parameters	Compliance Demonstration Requirements
7. NO <sub>x</sub>	<p><u>Limitations or Restrictions</u> The permittee shall not exceed NO<sub>x</sub> emissions of 9 ppmvd @15% O<sub>2</sub> for the FT-8 Stationary Gas Turbine Cogeneration System.[ CP/OP 053-0049 Part V]</p> <p>NO<sub>2</sub> emissions shall not exceed 50 ppmvd (corrected to 15% O<sub>2</sub>) during periods of start-up, shutdown and malfunction. [CP/OP 053-0049 Part I.C.4]</p> <p>i. <u>Monitoring and Testing Requirements</u> The permittee shall monitor the NO<sub>x</sub> emissions from the FT-8 Stationary Gas Turbine Cogeneration System using a continuous emissions monitor. [CP/OP 053-0049 Part III.C]</p> <p>ii. <u>Record Keeping Requirements</u> The permittee shall make and keep records of the NO<sub>x</sub> emissions from the FT-8 Stationary Gas Turbine Cogeneration System. All data will be corrected to a dry basis and 15% O<sub>2</sub>. [CP/OP 053-0049 Part III.C]</p>

### Section III: Applicable Requirements and Compliance Demonstration

Table III.B. EMISSION UNIT EMU-002

Pollutants or Process Parameters	Compliance Demonstration Requirements
8. NOx Budget Program	<p><u>Limitations or Restrictions</u> For the year 2002, the owner or operator of a budget unit shall comply with the NOx allowance use and transfer as described in RCSA 22a-174-22a(f).</p> <p>i. <u>Monitoring and Testing Requirements</u> The permittee shall achieve compliance with monitoring and testing of the FT-8 Stationary Gas Turbine Cogeneration System as described in RCSA 22a-174-22a(i).</p> <p>ii. <u>Record Keeping Requirements</u> The permittee shall make and keep records for the FT-8 Stationary Gas Turbine Cogeneration System as described below.</p> <ol style="list-style-type: none"><li>The owner or operator of a budget source shall make records of all measurements, data, reports, and other information required by this section or other state law, regulation, permit, or order. [RCSA 22a-174-22a(j)(1)]</li><li>The owner or operator of a budget source shall maintain such records for a period of five (5) years. [RCSA 22a-174-22a(j)(2)]</li><li>The records and documents required by this subsection shall be made available to the commissioner upon the request of the commissioner. [RCSA 22a-174-22a(j)(3)]</li></ol>



### Section III: Applicable Requirements and Compliance Demonstration

Table III.B. EMISSION UNIT EMU-002	
Pollutants or Process Parameters	Compliance Demonstration Requirements
8. NOx Budget Program, continued	<p>iii. <u>Reporting Requirements</u>  The permittee shall report as described below:</p> <ol style="list-style-type: none"> <li>The Authorized Account Representative (AAR) or Alternate AAR of a budget source using non-CEMs-based methodologies shall submit to the Administrator emissions and operations information for all four (4) calendar quarters each year. All emissions and operations information shall be submitted in accordance with 40 CFR Part 75, Subpart G, and Guidance for Implementation of Emission Monitoring Requirements for the NOx Budget Program (Ozone Transport Commission, Washington, D.C., January 28, 1997). The AAR or Alternate AAR shall submit such emissions and operations information within thirty (30) days after the end of the quarter in which the information was recorded. The AAR or Alternate AAR shall submit this information in an electronic format consistent with the requirements of with Emission Reporting Requirements and Instructions (EDR 2.0) (USEPA, Acid Rain Division July 3, 1997), or in any other format approved by the commissioner and the Administrator. [RCSA 22a-174-22a(k)(1)] [RCSA 22a-174-22b currently requires the use of EDR 2.1.]</li> <li>The AAR or Alternate AAR of a budget source shall provide, in the same quarterly reports, NOx emissions in pounds per hour for every hour of the control period, and cumulative quarterly and control period NOx emission data in pounds. The AAR or Alternate AAR shall submit this information in a format consistent with Emission Reporting Requirements and Instructions (EDR 2.0) (USEPA, Acid Rain Division July 3, 1997). [RCSA 22a-174-22a(k)(2)]</li> <li>For each control period, the AAR or Alternate AAR of a budget source shall submit an annual compliance certification to the commissioner no later than the allowance transfer deadline following the control period. [RCSA 22a-174-22a(m)(1)]</li> </ol>

### Section III: Applicable Requirements and Compliance Demonstration

**Table III.B. EMISSION UNIT EMU-002**

Pollutants or Process Parameters	Compliance Demonstration Requirements
9. Post-2002 NOx Budget Program	<p><u>Limitations or Restrictions</u> For each of the years beginning 2003, the owner or operator of a budget unit shall comply with the NOx allowance use and transfer as described in RCSA 22a-174-22b(i).</p> <p>i. <u>Monitoring and Testing Requirements</u> The permittee shall achieve compliance with monitoring and testing of the FT-8 Stationary Gas Turbine Cogeneration System as described in RCSA 22a-174-22b(n).</p> <p>ii. <u>Record Keeping Requirements</u> The permittee shall make and keep records for the FT-8 Stationary Gas Turbine Cogeneration System as described below.</p> <ul style="list-style-type: none"> <li>a. The owner or operator of a budget unit shall make records of all measurements, data, reports, and other information required by this section or other state law, regulation, permit, or order. [RCSA 22a-174-22b(o)(1)]</li> <li>b. The owner or operator of a budget unit shall retain such records for a period of five (5) years at the premises where such or such Budget Unit is located, unless the commissioner approves in writing the use of another location in Connecticut. The commissioner or the Administrator may require the owner or operator of such Budget Unit to retain such records for a longer period than five (5) years. [RCSA 22a-174-22b(o)(2)]</li> <li>c. The records and documents required by this subsection shall be made available to the commissioner upon the request of the commissioner. [RCSA 22a-174-22b(o)(3)]</li> </ul> <p>iii. <u>Reporting Requirements</u> The permittee shall submit reports as described in RCSA 22a-174-22b(p).</p>

### Section III: Applicable Requirements and Compliance Demonstration

**Table III.B. EMISSION UNIT EMU-002**

Pollutants or Process Parameters	Compliance Demonstration Requirements
10. Sulfur Dioxide	<p><u>Limitations or Restrictions</u>  On and after January 1, 2002, the owner or operator of an affected unit or units (affected unit means any emissions unit or units subject to the provisions of section 22a-174-22b of the Regulations of Connecticut State Agencies, the Post-2002 Nitrogen Oxides Budget Program) shall: [RCSA §22a -174-19a(c)]</p> <ol style="list-style-type: none"> <li>1. Combust liquid fuel, gaseous fuel or a combination of each provided that each fuel possess a fuel sulfur limit equal to or less than 0.5% sulfur, by weight (dry basis);</li> <li>2. Meet an average emission rate of equal to or less than 0.55 pounds SO<sub>2</sub> per MMBtu for each calendar quarter for an affected unit at the premises; or</li> <li>3. Meet an average emission rate of equal to or less than 0.5 pounds SO<sub>2</sub> per MMBtu calculated for each calendar quarter, if such owner or operator averages the emissions from two or more affected units at the premises.</li> </ol> <p>i. <u>Monitoring and Testing Requirements</u>  There are no monitoring and testing requirements pursuant to RCSA §22a-174-19a(i)(3)(i).</p> <p>ii. <u>Record Keeping Requirements</u>  Such records need not be maintained for distillate oil, motor vehicle fuel, aircraft fuel, or gaseous fuel, provided such fuels have a sulfur content below 0.3% by weight (dry basis) and are the only fuels combusted in the affected unit. [RCSA §22a -174-19a(i)(3)]</p> <p>iii. <u>Reporting Requirements</u>  The owner or operator of an affected unit for which the commissioner has issued a final Title V permit shall, as part of any compliance certification pursuant to section 22a-174-33(q)(2) of the Regulations of Connecticut State Agencies, certify in writing to the Commissioner compliance with the applicable provisions of this section. Such certification shall include actual quarterly SO<sub>2</sub> emissions in tons and either average quarterly fuel sulfur content or average quarterly emission rate, whichever is applicable, for each affected unit. [RCSA §22a -174-19a(j)(1)]</p>

## Section III: Applicable Requirements and Compliance Demonstration

### C. EMISSION UNITS GEMU-003

Table III.C. EMISSION UNITS GEMU-003	
Pollutants or Process Parameters	Compliance Demonstration Requirements
1. NO <sub>x</sub>	<p><u>Limitations or Restrictions</u> For any stationary source for which there is no applicable emission limitation in Table 22-1 or in subparagraphs (A) through (F) of Section 22(e)(2), the owner or operator of such source shall not cause or allow emissions of NO<sub>x</sub> therefrom in excess of the following: seven hundred (700) ppmvd. [RCSA §22a-174-22(e)(2)(G)]</p> <p>i. <u>Monitoring and Testing Requirements</u> The permittee shall conduct an emission test at least once every five years for the two vitiated inlet air heaters to demonstrate compliance with RCSA §22a-174-22. [RCSA §22a-174-22(k)(1)] Testing shall be conducted in compliance with sampling and analytical procedures approved under 40 CFR Part 60, Appendix A, or under procedures in RCSA §22a-174-5(d).</p> <p>On May 1, 1997, Pratt &amp; Whitney submitted a Request for Variance to the NO<sub>x</sub> RACT Stack Testing requirement for the two vitiated inlet air heaters (X-7 &amp; X-8) as provided under RCSA §22a-174-13. Pratt &amp; Whitney maintains that the testing of these sources is physically and technologically infeasible.</p> <p>ii. <u>Record Keeping Requirements</u> The permittee shall make and keep the records for the two vitiated inlet air heaters as described below.</p> <ol style="list-style-type: none"> <li>Monthly and annual records (e.g. fuel use, continuous emissions monitoring, operating hours) to determine whether NO<sub>x</sub> emissions from such premises in any calendar year are in excess of twenty-five (25) tons for a premises located in a severe nonattainment area for ozone or fifty (50) tons for a premises located in a serious nonattainment area for ozone; [RCSA §22a-174-22(l)(1)(C)]</li> <li>Records of all tune-ups, repairs, replacement of parts and other maintenance; [RCSA §22a-174-22(l)(1)(D)]</li> <li>Copies of all documents submitted to the Commissioner pursuant to this section; [RCSA §22a-174-22(l)(1)(E)]</li> <li>Procedures for calculating NO<sub>x</sub> emission rates in (B) and (C) above; [RCSA §22a-174-22(l)(1)(G)]</li> <li>Records of the dates, times and places of all emission testing required by this section, the persons performing the measurements, the testing methods used, the operating conditions at the time of testing, and the results of such testing. [RCSA §22a-174-22(l)(1)(H)]</li> </ol> <p>iii. <u>Reporting Requirements</u> The permittee of any source subject to RCSA §22a-174-22 shall submit a report on NO<sub>x</sub> emissions from such source, on a form provided by the Commissioner, on or before April 15 of each year. [RCSA §22a-174-22(l)(6)]</p>

### Section III: Applicable Requirements and Compliance Demonstration

#### D. EMISSION UNITS GEMU-009

Table III.D. EMISSION UNITS GEMU-009	
Pollutants or Process Parameters	Compliance Demonstration Requirements
1. Coating and Solvent Usage	<p><u>Limitations or Restrictions</u></p> <p>Pratt &amp; Whitney is allowed to use paints or coatings with a VOC content exceeding 3.5 pounds per gallon, only if all conditions of this permit are met. [CP/OP 053-0055 Part D.]</p> <p>i. <u>Monitoring and Testing Requirements</u></p> <p>The permittee shall monitor the usage of coatings, paints, thinners and cleaners used in the Overhaul &amp; Repair Operations spray booths through records of coating usage. [RCSA §22a-174-33(j)(1)(K)(ii)]</p> <p>ii. <u>Record Keeping Requirements</u></p> <p>The permittee shall maintain daily records of all coatings, paints, thinners and cleaners used in the Overhaul &amp; Repair Operations spray booths. Such records shall contain the following information: [CP/OP 053-0055 Part G.1]</p> <ul style="list-style-type: none"><li>a. Date used</li><li>b. Description, including name and the density (lbs./gallon)</li><li>c. Volatile organic compound content by weight</li><li>d. Water and exempt VOC content by weight</li><li>e. Non-volatile content by volume and by weight</li><li>f. Quantity used (gallons/day)</li><li>g. Cumulative 12 month consecutive record of usage (gallons) and VOC emissions</li></ul> <p>The permittee shall maintain an annual record of the type and quantity of any solvent that is used in the gun washer. In addition, accurate annual records must be kept of the quantity and type of solvents purchased, recycled or manifested as waste material, so as to determine the amount of solvent emitted to the atmosphere. This amount must be kept to a minimum. [CP/OP 053-0055 Part G.2]</p> <p>The permittee shall also maintain a 12 month consecutive record of the quantity and type of all paint used and the data used for determining their VOC content. This record shall include the quantity and type of each individual solvent component of the paint. [CP/OP 053-0055 Part G.3]</p>

### Section III: Applicable Requirements and Compliance Demonstration

Table III.D. EMISSION UNITS GEMU-009

Pollutants or Process Parameters	Compliance Demonstration Requirements
2. Allowable Emission Limits	<p><u>Limitations or Restrictions</u> Maximum Allowable VOC emissions from the Overhaul &amp; Repair Operations spray booths: 12 lb/hr, 12 lbs./day, 2.2 tons/12 consecutive months. [CP/OP 053-0055 Part D.]</p> <p>Maximum Allowable TSP emissions from the Overhaul &amp; Repair Operations spray booths: 0.70 lb/hr and 0.12 tons/12 consecutive months: [CP/OP 053-0055 Table 1]</p> <p>i. <u>Monitoring and Testing Requirements</u> The permittee shall monitor the VOC and TSP emissions for the Overhaul &amp; Repair Operations spray booths through records of coating usage. [RCSA §22a-174-33(j)(1)(K)(ii)]</p> <p>ii. <u>Record Keeping Requirements</u> The permittee shall make and keep records of the VOC and TSP emissions on an hourly, daily, monthly and consecutive twelve month basis for the Overhaul &amp; Repair Operations spray booths. The consecutive twelve month VOC and TSP emissions shall be calculated each calendar month by adding the current month's VOC and TSP emissions to that of the previous eleven months. The permittee shall record these figures monthly. [CP/OP 053-0055 Part G.1.g &amp; G.3]</p>

### Section III: Applicable Requirements and Compliance Demonstration

**Table III.D. EMISSION UNITS GEMU-009**

Pollutants or Process Parameters	Compliance Demonstration Requirements
3. Hazardous Air Pollutants (HAPs)	<p><u>Limitations or Restrictions</u>  The permittee shall ensure that the hazardous air pollutant emissions from this source comply with all applicable MASC limits under RCSA Section 22a-174-29, Tables 29-1, 29-2 and 29-3. A coating, solvent, thinner, or other compound used by this source, either for production or on a trial basis, which will emit a hazardous air pollutant may be utilized only if the permittee ensures that such emission complies with the applicable MASC. [CP/OP 053-0055 Part E]</p> <p>i. <u>Monitoring and Testing Requirements</u>  The permittee shall calculate the actual stack concentration (ASC) and the maximum allowable stack concentration (MASC) of each hazardous air pollutant (HAP) listed in Tables 29-1, 29-2 and 29-3 of RCSA §22a-174-29 that is emitted by this source. The permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC. [CP/OP 053-0055 Part E]  The MASC shall be calculated using the following equation:  MASC = 2406 (HLV) for ORO Booth I  MASC = 1928 (HLV) for ORO Booth II  MASC = 1703 (HLV) for ORO Booth III  where: HLV = the applicable hazard limiting value found in Tables 29-1, 29-2 and 29-3</p> <p>The ASC shall be calculated using the HAP's content in the material as applied (lb/gal) and the maximum consumption rate (gal/hr) as a worst case. This gives actual stack emissions in lb/hr which can be converted to <math>\mu\text{g}/\text{m}^3</math> using the following equation and the flow rate in acfm (<math>\mu\text{g}/\text{m}^3 = [\text{lb}/\text{hr} \times 453.6 \times 10^6 \mu\text{g}/\text{lb}] / [\text{acfm} \times 60 \text{ min}/\text{hr} \times 0.02832 \text{ m}^3/\text{ft}^3]</math>).</p> <p>ii. <u>Record Keeping Requirements</u>  The permittee shall make and keep records of the ASC calculations that demonstrate compliance with the MASC for each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 &amp; 29-3 emitted by this source. [CP/OP 053-0055 Part E.]</p> <p>iii. <u>Reporting Requirements</u>  The permittee shall submit a report to the Commissioner of any changes in materials, which contain hazardous air pollutants (HAP) that are regulated under RCSA §22a-174-29 and a demonstration of compliance with the MASC within 30 days of such changes. [CP/OP 053-0055 Part E.]</p>

### Section III: Applicable Requirements and Compliance Demonstration

#### E. EMISSION UNITS GEMU-010

Table III.E. EMISSION UNITS GEMU-010	
Pollutants or Process Parameters	Compliance Demonstration Requirements
1. Coating and Solvent Usage	<p><u>Limitations or Restrictions</u> Pratt &amp; Whitney is allowed to use paints or coatings with a VOC content exceeding 3.5 pounds per gallon, only if all conditions of this permit are met. [CP/OP 053-0065 &amp; 66 Part D.]</p> <p>i. <u>Monitoring and Testing Requirements</u> The permittee shall monitor the usage of coatings, paints, thinners and cleaners used in the Building E spray booths through records of coating usage. [RCSA §22a-174-33(j)(1)(K)(ii)]</p> <p>ii. <u>Record Keeping Requirements</u> The permittee shall maintain daily records of all coatings, paints, thinners and cleaners used in the Building E spray booths. Such records shall contain the following information: [CP/OP 053-0065 &amp; 66 Part G.1]</p> <ul style="list-style-type: none"> <li>a. Date used</li> <li>b. Description, including name and the density (lbs./gallon)</li> <li>c. Volatile organic compound content by weight</li> <li>d. Water and exempt VOC content by weight</li> <li>e. Non-volatile content by volume and by weight</li> <li>f. Quantity used (gallons/day)</li> <li>g. Cumulative 12 month consecutive record of usage (gallons) and VOC emissions</li> </ul> <p>The permittee shall maintain an annual record of the type and quantity of any solvent that is used in the gun washer. In addition, accurate annual records must be kept of the quantity and type of solvents purchased, recycled or manifested as waste material, so as to determine the amount of solvent emitted to the atmosphere. This amount must be kept to a minimum. [CP/OP 053-0065 &amp; 66 Part G.2]</p> <p>The permittee shall also maintain a 12 month consecutive record of the quantity and type of all paint used and the data used for determining their VOC content. This record shall include the quantity and type of each individual solvent component of the paint. [CP/OP 053-0065 &amp; 66 Part G.3]</p>



### Section III: Applicable Requirements and Compliance Demonstration

Table III.E. EMISSION UNITS GEMU-010

Pollutants or Process Parameters	Compliance Demonstration Requirements
2. Allowable Emission Limits	<p><u>Limitations or Restrictions</u> Maximum Allowable VOC emissions from the Building E spray booths: 8 lbs./day, 1.5 tons/12 consecutive months. [CP/OP 053-0065 &amp; 66 Part D.]</p> <p>Maximum Allowable TSP emissions from the Building E spray booths: 1.53 lb/hr and 0.28 tons/12 consecutive months: [CP/OP 053-0065 &amp; 66 Table 1]</p> <p>i. <u>Monitoring and Testing Requirements</u> The permittee shall monitor the VOC and TSP emissions for the Building E spray booths through records of coating usage. [RCSA §22a-174-33(j)(1)(K)(ii)]</p> <p>ii. <u>Record Keeping Requirements</u> The permittee shall make and keep records of the VOC and TSP emissions on an daily, monthly and consecutive twelve month basis for the Building E spray booths. The consecutive twelve month VOC and TSP emissions shall be calculated each calendar month by adding the current month's VOC and TSP emissions to that of the previous eleven months. The permittee shall record these figures monthly. [CP/OP 053-0065 &amp; 66 Part G.1.g &amp; G.3]</p>

### Section III: Applicable Requirements and Compliance Demonstration

**Table III.E. EMISSION UNITS GEMU-010**

Pollutants or Process Parameters	Compliance Demonstration Requirements
3. Hazardous Air Pollutants (HAPs)	<p><u>Limitations or Restrictions</u>  The permittee shall ensure that the hazardous air pollutant emissions from this source comply with all applicable MASC limits under RCSA Section 22a-174-29, Tables 29-1, 29-2 and 29-3. A coating, solvent, thinner, or other compound used by this source, either for production or on a trial basis, which will emit a hazardous air pollutant may be utilized only if the permittee ensures that such emission complies with the applicable MASC. [CP/OP 053-0065 &amp; 66 Part E]</p> <p>i. <u>Monitoring and Testing Requirements</u>  The permittee shall calculate the actual stack concentration (ASC) and the maximum allowable stack concentration (MASC) of each hazardous air pollutant (HAP) listed in Tables 29-1, 29-2 and 29-3 of RCSA §22a-174-29 that is emitted by this source. The permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC. [CP/OP 053-0065 &amp; 66 Part E]  The MASC shall be calculated using the following equation:  <math display="block">\text{MASC} = 1854.8 (\text{HLV}) \text{ for each spray booth}</math> where: HLV = the applicable hazard limiting value found in Tables 29-1, 29-2 and 29-3</p> <p>The ASC shall be calculated using the HAP's content in the material as applied (lb/gal) and the maximum consumption rate (gal/hr) as a worst case. This gives actual stack emissions in lb/hr which can be converted to <math>\mu\text{g}/\text{m}^3</math> using the following equation and the flow rate in acfm (<math>\mu\text{g}/\text{m}^3 = [\text{lb}/\text{hr} \times 453.6 \times 10^6 \mu\text{g}/\text{lb}] / [\text{acfm} \times 60 \text{ min}/\text{hr} \times 0.02832 \text{ m}^3/\text{ft}^3]</math>).</p> <p>ii. <u>Record Keeping Requirements</u>  The permittee shall make and keep records of the ASC calculations that demonstrate compliance with the MASC for each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 &amp; 29-3 emitted by this source. [CP/OP 053-0065 &amp; 66 Part E.]</p> <p>iii. <u>Reporting Requirements</u>  The permittee shall submit a report to the Commissioner of any changes in materials, which contain hazardous air pollutants (HAP) that are regulated under RCSA §22a-174-29 and a demonstration of compliance with the MASC within 30 days of such changes. [CP/OP 053-0065 &amp; 66 Part E.]</p>

### Section III: Applicable Requirements and Compliance Demonstration

#### F. EMISSION UNITS GEMU-011

Table III.F. EMISSION UNITS GEMU-011	
Pollutants or Process Parameters	Compliance Demonstration Requirements
1. Coating Usage	<p><u>Limitations or Restrictions</u></p> <p>The maximum application rate for the Hollow Fan Blade booth is 4.69 lb/hr, with a maximum PM-10 in coating, as applied, of 4.90 lbs./gal [CP/OP 053-0121 Part II.A.1 &amp; 2]</p> <p>The maximum application rate for the CANMC STC PB and the MERL STC PB booths is 31.75 lb/hr each. [CP/OP 053-0122 &amp; 053-0124 Part II.A.3]</p> <p>This booth shall only be used for the application of specialty coatings as defined in 40 CFR 63 Subpart GG and section B.3(a)(1) of the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations. [CP/OP 053-0122 &amp; 0124 Part II.D] Subpart GG does not regulate application of research and development coatings at aerospace facilities. [40 CFR §63.741(f)]</p> <p>i. <u>Monitoring and Testing Requirements</u></p> <p>The permittee shall monitor the usage of coatings, paints, thinners and cleaners used in the Hollow Fan Blade booth, the CANMC STC PB booth and the MERL STC PB booth through records of material usage. [RCSA §22a-174-33(j)(1)(K)(ii)]</p> <p>ii. <u>Record Keeping Requirements</u></p> <p>The source shall maintain records of all coatings (as applied) and cleaners used in the CANMC STC PB booth and the MERL STC PB booth. Such records shall contain the following information along with records required by 40 CFR 63.753 and section B.4 of the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations: [CP/OP 053-0122 &amp; 053-0124 Part III.A.1]</p> <ul style="list-style-type: none"> <li>a. A current list of coatings in use with category and VOC content less water and less exempt VOC as applied;</li> <li>b. A current list of cleaners in use with VOC content less water and less exempt VOC as applied;</li> <li>c. Solids content as applied.</li> </ul> <p>The permittee shall maintain daily records of all coatings, paints, thinners and cleaners used in the Hollow Fan Blade booth, the CANMC STC PB booth and the MERL STC PB booth. Such records shall contain the following information: [CP/OP 053-0121, 053-0122 &amp; 053-0124 Part III.A.2]</p> <ul style="list-style-type: none"> <li>a. Date of application;</li> <li>b. Name of coating or cleaner used;</li> <li>c. Amount of each coating used (gal).</li> </ul> <p>The permittee shall keep the following additional information for the Hollow Fan Blade booth: [CP/OP 053-0121 Part III.A.2]</p> <ul style="list-style-type: none"> <li>a. Hours of continuous spray</li> <li>b. Quantity and name of coating or cleaner spilled or manifested as waste material (lbs.)</li> </ul>

### Section III: Applicable Requirements and Compliance Demonstration

**Table III.F. EMISSION UNITS GEMU-011**

Pollutants or Process Parameters	Compliance Demonstration Requirements
2. Allowable Emissions	<p><u>Limitations or Restrictions</u></p> <p>Allowable VOC emissions from the Hollow Fan Blade booth: 0.002 lb/hr &amp; 0.01 tons/12 consecutive months. [CP/OP 053-0121 Part II.B.1]  Allowable TSP emissions from the Hollow Fan Blade booth: 0.115 lb/hr &amp; 0.50 tons/12 consecutive months. [CP/OP 053-0121 Part II.B.1]</p> <p>Allowable VOC emissions from the CANMC STC PB booth: 29.86 lb/hr &amp; 0.119 tons/12 consecutive months. [CP/OP 053-0122 Part II.C.1]  Allowable TSP emissions from the CANMC STC PB booth: 0.006 lb/hr &amp; 0.002 tons/12 consecutive months. [CP/OP 053-0122 Part II.C.1]</p> <p>Allowable VOC emissions from the MERL STC PB booth: 29.86 lb/hr &amp; 0.04 tons/12 consecutive months. [CP/OP 053-0124 Part II.C.1]  Allowable TSP emissions from the MERL STC PB booth: 0.006 lb/hr &amp; 0.0006 tons/12 consecutive months. [CP/OP 053-0124 Part II.C.1]</p> <p>i. <u>Monitoring and Testing Requirements</u>  The permittee shall monitor the VOC and TSP emissions for the Hollow Fan Blade booth, the CANMC STC PB booth and the MERL STC PB booth through records of coating usage. [RCSA §22a-174-33(j)(1)(K)(ii)]</p> <p>ii. <u>Record Keeping Requirements</u>  The permittee shall make and keep records of the VOC and TSP emissions on an hourly, daily, monthly and consecutive twelve month basis for the Hollow Fan Blade booth, the CANMC STC PB booth and the MERL STC PB booth. The consecutive twelve month VOC and TSP emissions shall be calculated each calendar month by adding the current month's VOC and TSP emissions to that of the previous eleven months. The permittee shall record these figures monthly. [CP/OP 053-0121, 053-0122 &amp; 053-0124 Part III.A.2]</p>

### Section III: Applicable Requirements and Compliance Demonstration

**Table III.F. EMISSION UNITS GEMU-011**

Pollutants or Process Parameters	Compliance Demonstration Requirements
3. Hazardous Air Pollutants (HAPs)	<p><u>Limitations or Restrictions</u>  The permittee shall ensure that the hazardous air pollutant emissions from this source comply with all applicable MASC limits under RCSA Section 22a-174-29, Tables 29-1, 29-2 and 29-3. A coating, solvent, thinner, or other compound used by this source, either for production or on a trial basis, which will emit a hazardous air pollutant may be utilized only if the permittee ensures that such emission complies with the applicable MASC. [CP/OP 053-0121, 053-0122 &amp; 053-0124 Part III.B]</p> <p>i. <u>Monitoring and Testing Requirements</u>  The permittee shall calculate the actual stack concentration (ASC) and the maximum allowable stack concentration (MASC) of each hazardous air pollutant (HAP) listed in Tables 29-1, 29-2 and 29-3 of RCSA §22a-174-29 that is emitted by this source. The permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC. [CP/OP 053-0121, 053-0122 &amp; 053-0124 Part III.B]  The MASC shall be calculated using the following equation:  MASC = C (HLV) for Hollow Fan Blade booth [CP/OP 053-0121 Part III.B]  MASC = 1285 (HLV) for CANMC STC PB booth [CP/OP 053-0122 Part III.B]  MASC = 978.5 (HLV) for MERL STC PB booth [CP/OP 053-0124 Part III.B]  where: HLV = the applicable hazard limiting value found in Tables 29-1, 29-2 and 29-3  C = a constant based on stack parameters</p> <p>The ASC shall be calculated using the HAP's content in the material as applied (lb/gal) and the maximum consumption rate (gal/hr) as a worst case. This gives actual stack emissions in lb/hr which can be converted to <math>\mu\text{g}/\text{m}^3</math> using the following equation and the flow rate in acfm (<math>\mu\text{g}/\text{m}^3 = [\text{lb}/\text{hr} \times 453.6 \times 10^6 \mu\text{g}/\text{lb}] / [\text{acfm} \times 60 \text{ min}/\text{hr} \times 0.02832 \text{ m}^3/\text{ft}^3]</math>).</p> <p>ii. <u>Record Keeping Requirements</u>  The permittee shall make and keep records of the ASC calculations that demonstrate compliance with the MASC for each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 &amp; 29-3 emitted by this source. [RCSA §22a-174-33(j)(1)(K)(ii)]</p> <p>iii. <u>Reporting Requirements</u>  The permittee shall submit a report to the Commissioner of any changes in materials, which contain hazardous air pollutants (HAP) that are regulated under RCSA §22a-174-29 and a demonstration of compliance with the MASC within 30 days of such changes. [CP/OP 053-0121, 053-0122 &amp; 053-0124 Part III.B.4]</p>

### Section III: Applicable Requirements and Compliance Demonstration

#### G. EMISSION UNITS GEMU-009, GEMU-010, GEMU-011, GEMU-012

Table III.G. EMISSION UNITS GEMU-009, GEMU-010, GEMU-011, GEMU-012	
Pollutants or Process Parameters	Compliance Demonstration Requirements
1. Spray Gun Cleaning	<p><u>Limitations or Restrictions</u></p> <p>Each owner or operator of a new or existing spray gun cleaning operation subject to this subpart in which spray guns are used for the application of coatings or any other materials that require the spray guns to be cleaned shall use one or more of the techniques, or their equivalent, specified in paragraphs (c)(1) through (c)(4) of this section. Spray gun cleaning operations using cleaning solvent solutions that contain HAP and VOC below the de minimis levels specified in §63.741(f) are exempt from the requirements in paragraphs (c)(1) through (c)(4) of this section. [40 CFR §63.744(c)]</p> <p>i. <u>Monitoring and Testing Requirements</u></p> <p>The permittee shall monitor the solvents used for spray gun cleaning operations through records of material purchases and inventory. [RCSA §22a-174-33(j)(1)(K)(ii)]</p> <p>Each owner or operator using an enclosed spray gun cleaner under §63.744(c)(1) shall visually inspect the seals and all other potential sources of leaks associated with each enclosed gun spray cleaner system at least once per month. Each inspection shall occur while the system is in operation [40 CFR §63.751(a)]</p> <p>ii. <u>Record Keeping Requirements</u></p> <p>The permittee shall make and keep records of the solvents used for spray gun cleaning operations. [40 CFR Part 63 Subpart GG] [RCSA §22a-174-33(j)(1)(K)(ii)]</p> <p>Each owner or operator of a new or existing cleaning operation subject to this subpart shall record the following information [40 CFR §63.752(b)]:</p> <p>(1) The name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility;</p> <p>(5) A record of all leaks from enclosed spray gun cleaners identified pursuant to §63.751(a) that includes for each leak found:</p> <ul style="list-style-type: none"><li>(i) Source identification;</li><li>(ii) Date leak was discovered; and</li><li>(iii) Date leak was repaired.</li></ul>

### Section III: Applicable Requirements and Compliance Demonstration

Table III.G. EMISSION UNITS GEMU-009, GEMU-010, GEMU-011, GEMU-012

Pollutants or Process Parameters	Compliance Demonstration Requirements
1. Spray Gun Cleaning, continued	<p>iii. <u>Reporting Requirements</u></p> <p>Each owner or operator of a cleaning operation subject to this subpart shall submit the following information [40 CFR §63.753(b)]:</p> <p>(1) Semiannual reports occurring every 6 months from the date of notification of compliance status that identify:</p> <ul style="list-style-type: none"><li>(iii) Any instance where a noncompliant spray gun cleaning method is used;</li><li>(iv) Any instance where a leaking enclosed spray gun cleaner remains unrepaired and in use for more than 10 days; and</li><li>(v) If the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.</li></ul>

### Section III: Applicable Requirements and Compliance Demonstration

#### H. EMISSION UNITS GEMU-013

Table III.H. EMISSION UNITS GEMU-013	
Pollutants or Process Parameters	Compliance Demonstration Requirements
1. Coating Usage	<p><u>Limitations or Restrictions</u></p> <p>The maximum application rate for the Plasma spray booth MERL PSB is 15.0 lb/hr [CP/OP 053-0123 Part II.A.2]</p> <p>The maximum application rate for the Plasma spray booth AMS HVOF is 15.0 lb/hr and 131,400 lb/12 consecutive months [CP/OP 053-0132 Part II.A.2 &amp; 3]</p> <p>i. <u>Monitoring and Testing Requirements</u></p> <p>The permittee shall monitor the usage of coatings and cleaners used in the Plasma spray booth MERL PSB and the Plasma spray booth AMS HVOF through records of coating and cleaner usage. [RCSA §22a-174-33(j)(1)(K)(ii)]</p> <p>ii. <u>Record Keeping Requirements</u></p> <p>The permittee shall maintain records of all coatings (as applied) used in the Plasma spray booth MERL PSB and the Plasma spray booth AMS HVOF. Such records shall contain the following information: [CP/OP 053-0123 &amp; 053-0132 Part III.A.1]</p> <ol style="list-style-type: none"><li>Description of the coating; and</li><li>Individual HAP content as applied (lb HAP/lb coating).</li></ol> <p>For the Plasma spray booth MERL PSB, the permittee shall keep the following records hourly, daily and monthly: [CP/OP 053-0123 Part III.A.2]</p> <ol style="list-style-type: none"><li>date</li><li>Hours of continuous spray</li><li>Name of coating used</li><li>Amount of coating used (lb)</li><li>Quantity and name of coating or cleaner spilled or manifested as waste material (lb)</li></ol>



### Section III: Applicable Requirements and Compliance Demonstration

Table III.H. EMISSION UNITS GEMU-013

Pollutants or Process Parameters	Compliance Demonstration Requirements
1. Coating Usage, continued	<p data-bbox="338 440 810 467">ii. <u>Record Keeping Requirements, continued</u></p> <p data-bbox="369 467 1950 527">For the Plasma spray booth AMS HVOF, the permittee shall keep the following records monthly and 12 consecutive months: [CP/OP 053-0132 Part III.A.2]</p> <ul data-bbox="369 527 779 587" style="list-style-type: none"><li data-bbox="369 527 659 555">a. Name of coating used;</li><li data-bbox="369 555 779 587">b. Amount of each coating used (lb).</li></ul> <p data-bbox="369 621 1934 711">The consecutive twelve month powder coat usage shall be calculated each calendar month by adding the current month's powder coat usage to that of the previous eleven months. The permittee shall record these figures monthly for the Plasma spray booth AMS HVOF. [CP/OP 053-0132 Part III.A.2]</p>

### Section III: Applicable Requirements and Compliance Demonstration

Table III.H. EMISSION UNITS GEMU-013

Pollutants or Process Parameters	Compliance Demonstration Requirements
2. Allowable Emissions	<p><u>Limitations or Restrictions</u> Allowable TSP emissions from the Plasma spray booth MERL PSB: 0.000525 lb/hr &amp; 0.0023 tons/12 consecutive months. [CP/OP 053-0123 Part II.C.1]  Allowable TSP emissions from the Plasma spray booth AMS HVOF: 0.0023 tons/12 consecutive months. [CP/OP 053-0132 Part II.C.1]</p> <p>i. <u>Monitoring and Testing Requirements</u> The permittee shall monitor the VOC and TSP emissions for the Plasma spray booth MERL PSB and the Plasma spray booth AMS HVOF through records of coating usage. [RCSA §22a-174-33(j)(1)(K)(ii)]</p> <p>ii. <u>Record Keeping Requirements</u> The permittee shall make and keep records of the PM-10 emissions on a monthly and consecutive twelve month basis for the Plasma spray booth MERL PSB and the Plasma spray booth AMS HVOF. The consecutive twelve month PM-10 emissions shall be calculated each calendar month by adding the current month's PM-10 emissions to that of the previous eleven months. The permittee shall record these figures monthly. [CP/OP 053-0123 &amp; 053-0132 Part III.A.2]</p>

### Section III: Applicable Requirements and Compliance Demonstration

**Table III.H. EMISSION UNITS GEMU-013**

Pollutants or Process Parameters	Compliance Demonstration Requirements
3. Hazardous Air Pollutants (HAPs)	<p><u>Limitations or Restrictions</u>  The permittee shall ensure that the hazardous air pollutant emissions from this source comply with all applicable MASC limits under RCSA Section 22a-174-29, Tables 29-1, 29-2 and 29-3. A coating, solvent, thinner, or other compound used by this source, either for production or on a trial basis, which will emit a hazardous air pollutant may be utilized only if the permittee ensures that such emission complies with the applicable MASC. [CP/OP 053-0123 &amp; 053-0132 Part III.B]</p> <p>i. <u>Monitoring and Testing Requirements</u>  The permittee shall calculate the actual stack concentration (ASC) and the maximum allowable stack concentration (MASC) of each hazardous air pollutant (HAP) listed in Tables 29-1, 29-2 and 29-3 of RCSA §22a-174-29 that is emitted by this source. The permittee shall demonstrate, by comparing the results from such calculations, that the ASC of each HAP does not exceed the appropriate MASC. [CP/OP 053-0123 &amp; 053-0132 Part III.B]  The MASC shall be calculated using the following equation:  MASC = 300 (HLV) for the MERL PSB booth [CP/OP 053-0123 Part III.B]  MASC = 13.6 (HLV) for the AMS HVOF booth [CP/OP 053-0132 Part III.B]  where: HLV = the applicable hazard limiting value found in Tables 29-1, 29-2 and 29-3</p> <p>The ASC shall be calculated using the HAP's content in the material as applied (lb/gal) and the maximum consumption rate (gal/hr) as a worst case. This gives actual stack emissions in lb/hr which can be converted to <math>\mu\text{g}/\text{m}^3</math> using the following equation and the flow rate in acfm (<math>\mu\text{g}/\text{m}^3 = [\text{lb}/\text{hr} \times 453.6 \times 10^6 \mu\text{g}/\text{lb}] / [\text{acfm} \times 60 \text{ min}/\text{hr} \times 0.02832 \text{ m}^3/\text{ft}^3]</math>).</p> <p>ii. <u>Record Keeping Requirements</u>  The permittee shall make and keep records of the ASC calculations that demonstrate compliance with the MASC for each HAP listed in RCSA §22a-174-29 Tables 29-1, 29-2 &amp; 29-3 emitted by this source. [RCSA §22a-174-33(j)(1)(K)(ii)]</p> <p>iii. <u>Reporting Requirements</u>  The permittee shall submit a report to the Commissioner of any changes in materials, which contain hazardous air pollutants (HAP) that are regulated under RCSA §22a-174-29 and a demonstration of compliance with the MASC within 30 days of such changes. [CP/OP 053-0123 &amp; 053-0132 Part III.B.4]</p>

### Section III: Applicable Requirements and Compliance Demonstration

#### I. EMISSION UNITS GEMU-014

Table III.I. EMISSION UNITS GEMU-014	
Pollutants or Process Parameters	Compliance Demonstration Requirements
1. Solvent Usage	<p><u>Limitations or Restrictions</u> None</p> <p>i. <u>Monitoring and Testing Requirements</u> The permittee shall monitor the amount of solvent added monthly to each cold cleaning unit by keeping a monthly log. [RCSA §22a-174-20(l)(3)(K)]</p> <p>ii. <u>Record Keeping Requirements</u> The permittee shall make and keep records of the amount of solvent added monthly to each cold cleaning unit. [RCSA §22a-174-20(l)(3)(K)]</p>

### Section III: Applicable Requirements and Compliance Demonstration

#### J. EMISSION UNITS GEMU-015

Table III.J. EMISSION UNITS GEMU-015	
Pollutants or Process Parameters	Compliance Demonstration Requirements
1. Capacity of the Storage Vessels	<p><u>Limitations or Restrictions</u> None</p> <p>i. <u>Monitoring and Testing Requirements</u> The owner or operator of each storage vessel as specified in §60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Each storage vessel with a design capacity less than 75 m<sup>3</sup> is subject to no provision of this subpart other than those required by this paragraph. [40 CFR §60.116(b)]</p> <p>ii. <u>Record Keeping Requirements</u> The owner or operator shall keep copies of the record required by paragraph (b) of this section for the life of the source. [40 CFR §60.116(a)]</p>

### Section III: Applicable Requirements and Compliance Demonstration

#### K. PREMISES-WIDE GENERAL REQUIREMENTS

Table III.K. PREMISES-WIDE GENERAL REQUIREMENTS		
Pollutants or Process Parameters	Applicable Regulatory References/Citations	Compliance Demonstration Requirements
Record Keeping Requirements	RCSA §22a-174-33(o)(2)	The permittee shall maintain and keep records of all required monitoring data and supporting information at the premises and make such records available for inspection and copying by the Commissioner at the premises, for at least five years from the date such data and information were obtained, in accordance with Section VII.F. of this permit and RCSA §22a-174-33(o)(2).
Reporting Requirements	RCSA §22a-174-33(o)(1) §22a-174-33(q)(1) §22a-174-33(q)(2)	<ul style="list-style-type: none"> <li>i. The permittee shall submit to the commissioner written monitoring reports on January 30 and July 30 of each year in accordance with Section VII.E. of this permit and RCSA §22a-174-33(o)(1).</li> <li>ii. The permittee shall, on January 30 and July 30 of each year, submit to the commissioner, a progress report, regarding the permittee's progress in achieving compliance under the compliance schedule contained in this permit, in accordance with Section VII.G. of this permit and RCSA §22a-174-33(q)(1).</li> <li>iii. The permittee shall, on January 30 of each year, submit to the commissioner a written compliance certification in accordance with Section VII.H. of this permit and RCSA §22a-174-33(q)(2).</li> </ul>
Exemptions from Permitting	RCSA §22a-174-3b	The owner or operator of a stationary source that is an external combustion unit, an automotive refinishing operation, a nonmetallic mineral processing equipment, an emergency engine or a surface coating operation may construct and operate such source without obtaining a general permit for such source issued pursuant to CGS §22a-174(1) or a permit pursuant to RCSA §22a-174-3a in accordance with RCSA §22a-174-3b.
Emission Statements	RCSA §22a-174-4	The permittee shall submit annual emission inventory statements to the Commissioner in accordance with RCSA §22a-174-4(c)(1).

### Section III: Applicable Requirements and Compliance Demonstration

Table III.K. PREMISES-WIDE GENERAL REQUIREMENTS, continued		
Pollutants or Process Parameters	Applicable Regulatory References/Citations	Compliance Demonstration Requirements
Smoke and Opacity Monitoring	RCSA §22a-174-4	The permittee shall comply with the procedures for smoke and opacity monitoring as specified in RCSA §22a-174-4.
Emission Testing	RCSA §22a-174-5	The permittee shall comply with the methods of sampling, emission testing, sample analysis, and reporting as specified in RCSA §22a-174-5.
Emergency Episode Procedures	RCSA §22a-174-6	The permittee shall comply with the procedures for emergency episodes as specified in RCSA §22a-174-6.
Malfunctions	RCSA §22a-174-7	The permittee shall comply with the procedures for malfunction of control equipment as specified in RCSA §22a-174-7.
Public Availability of Information	RCSA 22a-174-10	The public availability of information shall apply, as specified in RCSA §22a-174-10.
Prohibition against Concealment/ circumvention	RCSA §22a-174-11	The permittee shall comply with the prohibition against concealment or circumvention as specified in RCSA §22a-174-11.
Particulates	RCSA §22a-174-18	The permittee shall comply with the standards for control of particulate emissions as specified in RCSA §22a-174-18.
Sulfur Compounds	RCSA §22a-174-19	The permittee shall comply with the standards for control of sulfur compound emissions as specified in RCSA §22a-174-19.
Organic Compounds	RCSA §22a-174-20	The permittee shall comply with the standards for control of organic compound emissions as specified in RCSA §22a-174-20.

### Section III: Applicable Requirements and Compliance Demonstration

Table III.K. PREMISES-WIDE GENERAL REQUIREMENTS, continued		
Pollutants or Process Parameters	Applicable Regulatory References/Citations	Compliance Demonstration Requirements
Nitrogen Oxides	RCSA §22a-174-22	The permittee shall comply with the standards for control of nitrogen oxides emissions as specified in RCSA §22a-174-22.
Emission Fees	RCSA §22a-174-26	The permittee shall pay an emission fee in accordance with RCSA §22a-174-26.
VOC emissions from Surface Coating Operations	CP/OP 053-0055, 65 & 66 Part D CP/OP 053-0121, 122, 124 Part IV.B.	Maximum VOC emissions (from paints, coatings, thinners and cleaner) from all surface coating operations on the premises shall not exceed 1,666 pounds per calendar month.
Control Techniques Guideline	CP/OP 053-0122, 124 Part IV.A.	The permittee shall comply with the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations EPA-453/R-97-004. [CP/OP 053-0122,124 Part IV.A]
Fuel Limitation	CP/OP 053-0049 Part VIII.E	All fuel burning point sources, excluding the FT-8 Stationary Gas Turbine Cogeneration System, at the Pratt & Whitney, 400 Main Street, East Hartford, Connecticut plant shall burn an aggregate of no greater than 23,500,000 gallons per year of fuel oil over any consecutive 12 month period. [CP/OP 053-0049 Part VIII.E.]
Aerospace MACT	40 CFR 63, Subpart GG	The permittee shall comply with the national emission standards for aerospace manufacturing and rework facilities as specified in 40 CFR 63, Subpart GG.
Housekeeping Measures	40 CFR 63, Subpart GG	Each owner or operator of a new or existing cleaning operation subject to this subpart shall comply with the requirements in these paragraphs unless the cleaning solvent used is identified in Table 1 of this section or contains HAP and VOC below the de minimis levels specified in §63.741(f). [40 CFR §63.744(a)] (1) Place cleaning solvent-laden cloth, paper, or any other absorbent applicators used for cleaning in bags or other closed containers upon completing their use. Ensure that these bags and containers are kept closed at all times except when depositing or removing these materials from the container. Use bags and containers of such design so as to contain the vapors of the cleaning solvent. Cotton tipped swabs used for very small cleaning operations are exempt from this requirement. (2) Store fresh and spent cleaning solvents, except semi-aqueous solvent cleaners, used in aerospace cleaning operations in closed containers. (3) Conduct the handling and transfer of cleaning solvents to or from enclosed systems, vats, waste containers and other cleaning operation equipment that hold or store fresh or spent cleaning solvents in such a manner that minimizes spills.



### Section III: Applicable Requirements and Compliance Demonstration

**Table III.K. PREMISES-WIDE GENERAL REQUIREMENTS, continued**

Pollutants or Process Parameters	Applicable Regulatory References/Citations	Compliance Demonstration Requirements
Miscellaneous Hand Wipe Cleaning	40 CFR 63, Subpart GG	<p>Each owner or operator of a new or existing hand-wipe cleaning operation (excluding cleaning of spray gun equipment performed in accordance with paragraph (c) of §63.744) subject to this subpart shall use cleaning solvents that meet one of the requirements specified in paragraphs (b)(1), (b)(2) and (b)(3) of this section. Cleaning solvent solutions that contain HAP and VOC below the de minimis levels specified in §63.741(f) are exempt from the requirements in paragraphs (b)(1), (b)(2) and (b)(3) of this section. [40 CFR §63.744(b)]</p> <ol style="list-style-type: none"> <li>(1) Meet one of the composition requirements in Table 1 of this section;</li> <li>(2) Have a composite vapor pressure of 45 mm Hg (24.1 inches of water) or less at 20 °C (68 °F); or</li> <li>(3) Demonstrate that the volume of hand-wipe solvents used in cleaning operations has been reduced by at least 60% from a baseline adjusted for production. The baseline shall be established as part of an approved alternative plan administered by the State. The alternative plan shall be submitted by the State under section 112(l) of the Act, and approved by the Administrator, and shall demonstrate that the 60% volume reduction in cleaning solvents provides equivalent reductions to the requirements in paragraph (b)(1) or (b)(2).</li> </ol> <p>i. <u>Monitoring and Testing Requirements</u></p> <p>The permittee shall monitor the solvents used for hand-wipe cleaning operations through records of material purchases and inventory. [RCSA §22a-174-33(j)(1)(K)(ii)]</p> <p>Compliance with the hand-wipe cleaning solvent approved composition list specified in §63.744(b)(1) for hand-wipe cleaning solvents shall be demonstrated using data supplied by the manufacturer of the cleaning solvent. The data shall identify all components of the cleaning solvent and shall demonstrate that one of the approved composition definitions is met. [40 CFR §63.750(a)]</p> <p>The composite vapor pressure of hand-wipe cleaning solvents used in a cleaning operation subject to this subpart shall be determined using the methods specified in paragraphs (b)(1) and (b)(2) of this section. [40 CFR §63.750(b)]</p>

### Section III: Applicable Requirements and Compliance Demonstration

**Table III.K. PREMISES-WIDE GENERAL REQUIREMENTS, continued**

Pollutants or Process Parameters	Applicable Regulatory References/Citations	Compliance Demonstration Requirements
Miscellaneous Hand Wipe Cleaning	40 CFR 63, Subpart GG	<p>ii. <u>Record Keeping Requirements</u>  The permittee shall make and keep records of the solvents used for hand-wipe cleaning operations. [40 CFR Part 63 Subpart GG] [RCSA §22a-174-33(j)(1)(K)(ii)]</p> <p>Each owner or operator of a new or existing cleaning operation subject to this subpart shall record the following information, as appropriate. [40 CFR §63.752(b)]:</p> <ol style="list-style-type: none"> <li>(1) The name, vapor pressure, and documentation showing the organic HAP constituents of each cleaning solvent used for affected cleaning operations at the facility.</li> <li>(2) For each cleaning solvent used in hand-wipe cleaning operations that complies with the composition requirements specified in §63.744(b)(1) or for semi-aqueous cleaning solvents used for flush cleaning operations: (i) The name of each cleaning solvent used; (ii) All data and calculations that demonstrate that the cleaning solvent complies with one of the composition requirements; and (iii) Annual record of the volume of each solvent used, as determined from facility purchase records or usage records.</li> <li>(3) For each cleaning solvent used in hand-wipe cleaning operations that does not comply with the composition requirements in §63.744(b)(1), but does comply with the vapor pressure requirement in §63.744(b)(2): (i) The name of each cleaning solvent used; (ii) The composite vapor pressure of each cleaning solvent used; (iii) All vapor pressure test results, if appropriate, data, and calculations used to determine the composite vapor pressure of each cleaning solvent; and (iv) The amount (in gallons) of each cleaning solvent used each month at each operation.</li> <li>(4) For each cleaning solvent used for exempt hand-wipe cleaning operations specified in §63.744(e) that does not conform to the vapor pressure or composition requirements of §63.744(b): (i) The identity and amount (in gallons) of each cleaning solvent used each month at each operation; and (ii) A list of the processes set forth in §63.744(e) to which the cleaning operation applies.</li> </ol>

### Section III: Applicable Requirements and Compliance Demonstration

Table III.K. PREMISES-WIDE GENERAL REQUIREMENTS, continued		
Pollutants or Process Parameters	Applicable Regulatory References/Citations	Compliance Demonstration Requirements
Miscellaneous Hand Wipe Cleaning	40 CFR 63, Subpart GG	<p>iii. <u>Reporting Requirements</u>  Each owner or operator of a cleaning operation subject to this subpart shall submit the following information [40 CFR §63.753(b)]:</p> <ul style="list-style-type: none"> <li>(1) Semiannual reports occurring every 6 months from the date of notification of compliance status that identify: <ul style="list-style-type: none"> <li>(i) Any instance where a noncompliant cleaning solvent is used for a non-exempt hand-wipe cleaning operation;</li> <li>(ii) A list of any new cleaning solvents used for hand-wipe cleaning in the previous 6 months and, as appropriate, their composite vapor pressure or notification that they comply with the composition requirements specified in §63.744(b)(1); and</li> <li>(v) If the operations have been in compliance for the semiannual period, a statement that the cleaning operations have been in compliance with the applicable standards. Sources shall also submit a statement of compliance signed by a responsible company official certifying that the facility is in compliance with all applicable requirements.</li> </ul> </li> </ul>

### Section III: Applicable Requirements and Compliance Demonstration

#### L. WORK PRACTICE STANDARDS AND OPERATION AND MAINTENANCE (O&M) PRACTICES

Table III.L. Work Practice Standards and Operation and Maintenance (O&M) Practices		
Emissions Unit Identification	Applicable Regulatory References/Citations	Work/O&M Practice Requirements
EMU-002	CP/OP 053-0049 Part VIII.A	The permittee shall properly operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations.
EMU-002	CP/OP 053-0049 Part IV.A.4	The permittee shall inspect the SCR catalyst once per year, at a minimum, and replace it as required through the monitoring of the catalyst test pieces.
GEMU-004, GEMU-005, GEMU-006	RCSA §22a-174-3b(e)(1)	As applicable, the owner or operator of an emergency engine shall properly maintain equipment and operate such engine in accordance with this subsection.
GEMU-009, GEMU-010	CP/OP 053-0055, 65, 66 Part B and I	<p>This source shall comply with any stipulations and recommendations set by the manufacturers of the spray guns, spray booths, dry panel filters, spray gun washer and waterwall on the method of operating this equipment in order to achieve their guaranteed transfer and capture efficiencies. The dry panel filters and waterwall shall be fully operational at all times that the spray equipment is in use. In addition, methods used to increase transfer efficiency shall include, but not limited to, the following:</p> <ul style="list-style-type: none"> <li>(i) Minimize the distance from the spray gun to the object being coated.</li> <li>(ii) Minimize the air velocity in the spray booth (but not below OSHA required levels).</li> <li>(iii) Keep the atomizing air pressure to a minimum level, as recommended by the spray gun manufacturer.</li> </ul> <p>Dry Filters must be inspected and replaced in accordance with Pratt &amp; Whitney's Preventive Maintenance Procedure regarding painting operations. If a filter shows signs of clogging, cracking or excessive deterioration, it shall be cleaned or replaced as recommendation by the filter vendor. Filters shall be disposed in a manner consistent with all applicable local, state and federal environmental regulations.</p>

### Section III: Applicable Requirements and Compliance Demonstration

**Table III.L. Work Practice Standards and Operation and Maintenance (O&M) Practices, continued**

<b>Emissions Unit Identification</b>	<b>Applicable Regulatory References/Citations</b>	<b>Work/O&amp;M Practice Requirements</b>
GEMU-011, GEMU-012	CP/OP 053-0122, 124, 123 & 132 Part II.B.1-2	<p>The spray booth, spray guns, and filter media shall comply with any supplied warranties, recommendations and stipulations set by the manufacturer of this equipment.</p> <p>All control equipment specified in this permit shall be properly installed and in good operating condition before the spray booth is operated.</p>
GEMU-011	CP/OP 053-0122 & 124 Part II.B.3	Housekeeping operations shall comply with 40 CFR 63.744 and section B.3(c) of the EPA Control Techniques Guideline: Control of Volatile Organic Compound Emissions from Coating Operations at Aerospace Manufacturing and Rework Operations.
GEMU-014	RCSA §22a-174-20 (1)(3)	<p>The permittee shall meet all of the following required work and operational practices as applicable.</p> <ul style="list-style-type: none"> <li>i. Store waste degreasing solvent only in covered containers and not dispose of waste degreasing solvent or transfer it to another party, in a manner such that greater than 20 percent of the waste degreasing solvent (by weight) can evaporate into the atmosphere. [RCSA §22a-174-20(1)(3)(C)]</li> <li>ii. Close the cover whenever parts are not being handled in the cleaner for two (2) minutes or more, or when the device is not in use. [RCSA §22a-174-20(1)(3)(D)]</li> <li>iii. Drain the clean parts for at least 15 seconds or until dripping ceases, whichever is longer. [RCSA §22a-174-20(1)(3)(E)]</li> <li>iv. If used, supply a degreasing solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure which does not exceed ten (10) pounds per square inch as measured at the pump outlet and perform such spraying within the confines of the cold cleaning unit. [RCSA §22a-174-20(1)(3)(F)]</li> <li>v. Minimize the drafts across the top of each cold cleaning unit such that whenever the cover is open the unit is not exposed to drafts greater than 40 meters per minute, as measured between 1 and 2 meters upwind, and at the same elevation as the tank lip. [RCSA §22a-174-20(1)(3)(H)]</li> <li>vi. Do not operate the unit upon the occurrence of any visible solvent leak until such leak is repaired. [RCSA §22a-174-20(1)(3)(I)]</li> </ul>

## Section IV: Compliance Schedule

NOT APPLICABLE

TABLE IV. COMPLIANCE SCHEDULE				
Emissions units	Applicable regulations	Steps required for achieving compliance (Milestones)	Date by which each step is to be completed	Dates for monitoring, record keeping, and reporting
N/A				

## **Section V: State Enforceable Terms and Conditions**

Only the Commissioner of the Department of Environmental Protection has the authority to enforce the terms, conditions and limitations contained in this section.

- A.** This permit does not relieve the permittee of the responsibility to conduct, maintain and operate the emissions units in compliance with all applicable requirements of any other Bureau of the Department of Environmental Protection or any federal, local or other state agency. Nothing in this permit shall relieve the permittee of other obligations under applicable federal, state and local law.
- B.** Nothing in this permit shall affect the Commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, investigate air pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the permittee by the Commissioner.
- C.** Odors: The permittee shall not cause or permit the emission of any substance or combination of substances which creates or contributes to an odor that constitutes a nuisance beyond the property boundary of the premises as set forth in RCSA Section 22a-174-23.
- D.** Noise: The permittee shall operate in compliance with the regulations for the control of noise as set forth in RCSA 22a-69-1 through 22a-69-7.4, inclusive.
- E.** Hazardous Air Pollutants (HAPs): The permittee shall operate in compliance with the regulations for the control of HAPs as set forth in RCSA §22a-174-29.
- F.** Open Burning: The permittee is prohibited from conducting open burning, except as may be allowed by CGS 22a-174(f).
- G.** Fuel Sulfur Content: The permittee shall not use #2 heating oil that exceeds three-tenths of one percent sulfur by weight as set forth in CGS 22a-21a.

## Section VI: Permit Shield

### NO PERMIT SHIELD HAS BEEN GRANTED.

In accordance with Section 22a-174-33(k) of the RCSA, a permittee complying with the conditions of this permit shall be deemed in compliance with any applicable requirements identified in Table VI below as of the date of issuance. Also, in accordance with Section 22a-174-33(k) of the RCSA, a permittee complying with the conditions of this permit shall be deemed exempt from any non-applicable requirements identified below as of the date of issuance.

This permit shall not alter or affect the following:

- A. the provisions of section 303 of the Clean Air Act, including the authority of the Administrator under the Act;
- B. the liability of an owner or operator of a Title V source for any violation of applicable requirements prior to or at the effective date of a Title V permit;
- C. the applicable requirements of the acid rain program under 40 CFR Part 72; and
- D. the ability of the Administrator or Commissioner to obtain information from the owner or operator of a Title V source.

TABLE VI: PERMIT SHIELD				
Regulated Pollutants	Emissions Units	Applicable Requirement or Non-Applicable Requirement Descriptions	Applicable Regulatory References	*Applicability

\*For Applicability, use AR to indicate Applicable Requirement and NR for Non- Applicable Requirement



## **Section VII: Title V Requirements**

The Administrator of the United States Environmental Protection Agency and the Commissioner of Environmental Protection have the authority to enforce the terms and conditions contained in these sections.

### **A. SUBMITTALS TO THE COMMISSIONER & ADMINISTRATOR**

The date of submission to the Commissioner of any document required by this permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this permit, including, but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.

Any document required to be submitted to the Commissioner under this permit shall, unless otherwise specified in writing by the Commissioner, be directed to: Office of the Assistant Director; Compliance & Field Operations Division; Bureau of Air Management; Department of Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.

Any submittal to the Administrator of the U. S. Environmental Protection Agency shall be in a computer-readable format and addressed to: Director, Air Compliance Program; Attn: Air Compliance Clerk; Office of Environmental Stewardship; US EPA, Region 1; One Congress Street; Suite 1100 (SEA); Boston, MA 02114-2023.

### **B. CERTIFICATIONS [RCSA § 22a-174-33(b)]**

In accordance with Section 22a-174-33(b) of the RCSA, any report or other document required by this Title V permit and any other information submitted to the Commissioner or Administrator shall be signed by an individual described in Section 22a-174-2a(a) of the RCSA, or by a duly authorized representative of such individual. Any individual signing any document pursuant to Section 22a-174-33(b) of the RCSA shall examine and be familiar with the information submitted in the document and all attachments thereto, and shall make inquiry of those individuals responsible for obtaining the information to determine that the information is true, accurate, and complete, and shall also sign the following certification as provided in Section 22a-174-2a(a)(5) of the RCSA:

“I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under Section 22a-175 of the Connecticut General Statutes, under Section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute.”

### **C. SIGNATORY RESPONSIBILITY [RCSA § 22a-174-2a(a)]**

If an authorization pursuant to Section 22a-174-2a(a) of the RCSA is no longer effective because a different individual or position has assumed the applicable responsibility, a new authorization satisfying the requirements of Section 22a-174-2a(a)(2) of the RCSA shall be submitted to the Commissioner prior to or together with the submission of any applications, reports, forms, compliance certifications, documents or other information which is signed by an individual or a duly authorized representative of such individual pursuant to Section 22a-174-2a(a)(2) of the RCSA.

## **Section VII: Title V Requirements**

### **D. ADDITIONAL INFORMATION [RCSA § 22a-174-33(j)(1)(X)]**

The permittee shall submit additional information in writing, at the Commissioner's request, within thirty (30) days of receipt of notice from the Commissioner or by such other date specified by the Commissioner, whichever is earlier, including information to determine whether cause exists for modifying, revoking, reopening, reissuing, or suspending the permit or to determine compliance with the permit.

In addition, within fifteen days of the date the permittee becomes aware of a change in any information submitted to the Commissioner under this permit or of any change in any information contained in the application, or that any such information was inaccurate or misleading or that any relevant information was omitted, the permittee shall submit the changed, corrected, or omitted information to the Commissioner.

### **E. MONITORING REPORTS [RCSA § 22a-174-33(o)(1)]**

A permittee, required to perform monitoring pursuant this permit, shall submit to the Commissioner, on forms prescribed by the Commissioner, written monitoring reports on January 30 and July 30 of each year or on a more frequent schedule if specified in such permit. Such monitoring reports shall include the date and description of each deviation from a permit requirement including, but not limited to:

1. Each deviation caused by upset or control equipment deficiencies; and
2. Each deviation of a permit requirement that has been monitored by the monitoring systems required under this permit, which has occurred since the date of the last monitoring report; and
3. Each deviation caused by a failure of the monitoring system to provide reliable data.

### **F. PREMISES RECORDS [RCSA § 22a-174-33(o)(2)]**

Unless otherwise required by this permit, the permittee shall make and keep records of all required monitoring data and supporting information for at least five (5) years from the date such data and information were obtained. The permittee shall make such records available for inspection at the site of the subject source, and shall submit such records to the Commissioner upon request. The following information, in addition to required monitoring data, shall be recorded for each permitted source:

1. The type of monitoring or records used to obtain such data, including record keeping;
2. The date, place, and time of sampling or measurement;
3. The name of the individual who performed the sampling or the measurement and the name of such individual's employer;
4. The date(s) on which analyses of such samples or measurements were performed;
5. The name and address of the entity that performed the analyses;
6. The analytical techniques or methods used for such analyses;
7. The results of such analyses;

### **F. PREMISES RECORDS, continued [RCSA § 22a-174-33(o)(2)]**

## **Section VII: Title V Requirements**

8. The operating conditions at the subject source at the time of such sampling or measurement; and
9. All calibration and maintenance records relating to the instrumentation used in such sampling or measurements, all original strip-chart recordings or computer printouts generated by continuous monitoring instrumentation, and copies of all reports required by the subject permit.

### **G. PROGRESS REPORTS [RCSA § 22a-174-33(q)(1)]**

The permittee shall, on January 30 and July 30 of each year, or on a more frequent schedule if specified in this permit, submit to the Commissioner a progress report on forms prescribed by the Commissioner, and certified in accordance with Section 22a-174-2a(a)(5) of the RCSA. Such report shall describe the permittee's progress in achieving compliance under the compliance plan schedule contained in this permit. Such progress report shall:

1. Identify those obligations under the compliance plan schedule in the permit which the permittee has met, and the dates on which they were met; and
2. Identify those obligations under the compliance plan schedule in this permit which the permittee has not timely met, explain why they were not timely met, describe all measures taken or to be taken to meet them and identify the date by which the permittee expects to meet them.

Any progress report prepared and submitted pursuant to Section 22a-174-33(q)(1) of the RCSA shall be simultaneously submitted by the permittee to the Administrator.

### **H. COMPLIANCE CERTIFICATIONS [RCSA § 22a-174-33(q)(2)]**

The permittee shall, on January 30 of each year, or on a more frequent schedule if specified in this permit, submit to the Commissioner, a written compliance certification certified in accordance with Section 22a-174-2a(a)(5) of the RCSA and which includes the information identified in Title 40 CFR 70.6(c)(5)(iii)(A) to (C), inclusive.

Any compliance certification prepared and submitted pursuant to Section 22a-174-33(q)(2) of the RCSA shall be simultaneously submitted by the permittee to the Administrator.

### **I. PERMIT DEVIATION NOTIFICATIONS [RCSA § 22a-174-33(p)]**

Notwithstanding Subsection D of Section VII of this permit, the permittee shall notify the Commissioner in writing, on forms prescribed by the Commissioner, of any deviation from an emissions limitation, and shall identify the cause or likely cause of such deviation, all corrective actions and preventive measures taken with respect thereto, and the dates of such actions and measures as follows:

1. For any hazardous air pollutant, no later than twenty-four (24) hours after such deviation commenced; and
2. For any other regulated air pollutant, no later than ten (10) days after such deviation commenced.

### **J. PERMIT RENEWAL [RCSA § 22a-174-33(j)(1)(B)]**

All of the terms and conditions of this permit shall remain in effect until the renewal permit is issued or denied provided that a timely renewal application is filed in accordance with Sections 22a-174-33(g), -33(h), and -33(i) of the RCSA.

## **Section VII: Title V Requirements**

### **K. OPERATE IN COMPLIANCE [RCSA § 22a-174-33(j)(1)(C)]**

The permittee shall operate the source in compliance with the terms of all applicable regulations, the terms of this permit, and any other applicable provisions of law. In addition, any noncompliance constitutes a violation of the Clean Air Act and Chapter 446c of the Connecticut General Statutes and is grounds for federal and/or state enforcement action, permit termination, revocation and reissuance, or modification, and denial of a permit renewal application.

### **L. COMPLIANCE WITH PERMIT [RCSA § 22a-174-33(j)(1)(G)]**

This permit shall not be deemed to:

1. preclude the creation or use of emission reduction credits or the trading of such credits in accordance with Sections 22a-174-33(j)(1)(I) and 22a-174-33(j)(1)(P) of the RCSA, provided that the Commissioner's prior written approval of the creation, use, or trading is obtained;
2. authorize emissions of an air pollutant so as to exceed levels prohibited under 40 CFR Part 72;
3. authorize the use of allowances pursuant to 40 CFR Parts 72 through 78, inclusive, as a defense to noncompliance with any other applicable requirement; or
4. impose limits on emissions from items or activities specified in Sections 22a-174-33(g)(3)(A) and (B) of the RCSA unless imposition of such limits is required by an applicable requirement.

### **M. INSPECTION TO DETERMINE COMPLIANCE [RCSA § 22a-174-33(j)(1)(M)]**

The Commissioner may, for the purpose of determining compliance with the permit and other applicable requirements, enter the premises at reasonable times to inspect any facilities, equipment, practices, or operations regulated or required under the permit; to sample or otherwise monitor substances or parameters; and to review and copy relevant records lawfully required to be maintained at such premises in accordance with this permit. It shall be grounds for permit revocation should entry, inspection, sampling, or monitoring be denied or effectively denied, or if access to and the copying of relevant records is denied or effectively denied.

### **N. PERMIT AVAILABILITY**

The permittee shall have available at the facility at all times a copy of this Title V Operating Permit.

### **O. SEVERABILITY CLAUSE [RCSA § 22a-174-33(j)(1)(R)]**

The provisions of this permit are severable. If any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the remainder of this permit and the application of such provision to other circumstances shall not be affected.

### **P. NEED TO HALT OR REDUCE ACTIVITY [RCSA § 22a-174-33(j)(1)(T)]**

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

## **Section VII: Title V Requirements**

### **Q. PERMIT REQUIREMENTS [RCSA § 22a-174-33(j)(1)(V)]**

The filing of an application or of a notification of planned changes or anticipated noncompliance does not stay the permittee's obligation to comply with this permit.

### **R. PROPERTY RIGHTS [RCSA § 22a-174-33(j)(1)(W)]**

This permit does not convey any property rights or any exclusive privileges. This permit is subject to, and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby, including Section 4-181a(b) of the Connecticut General Statutes and Section 22a-3a-5(b) of the RCSA. This permit shall neither create nor affect any rights of persons who are not parties to this permit.

### **S. ALTERNATIVE OPERATING SCENARIO RECORDS [RCSA § 22a-174-33(o)(3)]**

The permittee shall, contemporaneously with making a change authorized by this permit from one alternative operating scenario to another, maintain a record at the premises indicating when changes are made from one operating scenario to another and shall maintain a record of the current alternative operating scenario.

### **T. OPERATIONAL FLEXIBILITY AND OFF-PERMIT CHANGES [RCSA § 22a-174-33(r)(2)]**

The permittee may engage in any action allowed by the Administrator in accordance with 40 CFR 70.4(b)(12)(i) to (iii)(B) inclusive, and 40 CFR 70.4(b)(14)(i) to (iv), inclusive without a Title V non-minor permit modification, minor permit modification or revision and without requesting a Title V non-minor permit modification, minor permit modification or revision provided such action does not:

1. constitute a modification under 40 CFR 60, 61 or 63,
2. exceed emissions allowable under the subject permit,
3. constitute an action which would subject the permittee to any standard or other requirement pursuant to 40 CFR 72 to 78, inclusive, or
4. constitute a non-minor permit modification pursuant to Section 22a-174-2a(d)(4) of the RCSA.

At least seven (7) days before initiating an action specified in Section 22a-174-33(r)(2)(A) of the RCSA, the permittee shall notify the Administrator and the Commissioner in writing of such intended action.

### **U. INFORMATION FOR NOTIFICATION [RCSA § 22a-174-33(r)(2)(A)]**

Written notification required under Section 22a-174-33(r)(2)(A) of the RCSA shall include a description of each change to be made, the date on which such change will occur, any change in emissions that may occur as a result of such change, any Title V permit terms and conditions that may be affected by such change, and any applicable requirement that would apply as a result of such change. The permittee shall thereafter maintain a copy of such notice with the Title V permit. The Commissioner and the permittee shall each attach a copy of such notice to their copy of the permit.

## **Section VII: Title V Requirements**

### **V. TRANSFERS [RCSA § 22a-174-2a(g)]**

No person other than the permittee shall act or refrain from acting under the authority of this permit unless this permit has been transferred to another person in accordance with Section 22a-174-2a(g) of the RCSA.

The proposed transferor and transferee of a permit shall submit to the Commissioner a request for a permit transfer on a form provided by the Commissioner. A request for a permit transfer shall be accompanied by any fees required by any applicable provision of the general statutes or regulations adopted thereunder. The Commissioner may also require the proposed transferee to submit with any such request, the information identified in CGS Section 22a-6m.

### **W. REVOCATION [RCSA § 22a-174-2a(h)]**

The Commissioner may revoke this permit on his own initiative or on the request of the permittee or any other person, in accordance with Section 4-182c of the Connecticut General Statutes, Section 22a-3a-5(d) of the RCSA, and any other applicable law. Any such request shall be in writing and contain facts and reasons supporting the request. The permittee requesting revocation of this permit shall state the requested date of revocation and provide the Commissioner with satisfactory evidence that the emissions authorized by this permit have been permanently eliminated.

Pursuant to the Clean Air Act, the Administrator has the power to revoke this permit. Pursuant to the Clean Air Act, the Administrator also has the power to reissue this permit if the Administrator has determined that the Commissioner failed to act in a timely manner on a permit renewal application.

This permit may be modified, revoked, reopened, reissued, or suspended by the Commissioner, or the Administrator in accordance with Section 22a-174-33(r) of the RCSA, Connecticut General Statutes Section 22a-174c, or Section 22a-3a-5(d) of the RCSA.

### **X. REOPENING FOR CAUSE [RCSA § 22a-174-33(s)]**

This permit may be reopened by the Commissioner, or the Administrator in accordance with Section 22a-174-33(s) of the RCSA.

### **Y. CREDIBLE EVIDENCE**

Notwithstanding any other provision of this permit, for the purpose of determining compliance or establishing whether a permittee has violated or is in violation of any permit condition, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information.